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Original Communications.

Suit for Damages in a case of Fracture of the Leg, followed by Mortification and Amputation. Reported by Prof. JOHN DAWSON, M.D.

Dr. G. W. Butler, of Alton, Ohio, was called to see F. M. B., in December last. The latter had just suffered a fracture of the tibia and fibula at about the junction of the middle with the lower third of the bones. The fracture was occasioned by the leg being caught in the fly-wheel of a sawmill. On inspection, it proved to be compound and comminuted. The extent of injury of the soft parts was not ascertained. The leg was bandaged and placed in a splint (Day's). At the time of the dressing there was little sensibility or warmth in the foot. The usual appliances were made without effect. On the third day the dressing was removed, and additional efforts made to restore warmth, but to no purpose. On the seventh day the case was seen by Prof. J. W. Hamilton, with reference to amputation. The leg was still found to be cold, discolored, and on the dorsum of the foot phlyctænæ were present. The patient, supposing the foot not entirely destitute of life, another effort was made to restore circulation. This again proving unsatisfactory, the leg was amputated on the next day, the eighth after the accident.

After the amputation the patient recovered, without trouble, ex-

cept a little secondary hemorrhage, and is now in the apparent enjoyment of good health.

Such is the history of this case as we learned it from the account given of it in the Journal (January number, 1862), and the evidence before the court.

The patient, Mr. B., being dissatisfied with results, brought suit against Dr. J. W. Butler, in the Court of Common Pleas, Franklin county, Ohio, for damages, alleging unskillful treatment and gross neglect on the part of Dr. Butler.

We were present most of the time during the trial, and will merely narrate what passed before us, for the benefit of our readers. We hope to be excused, however, from details, further than they serve to illustrate some point of general interest. Moreover, we shall omit the citation of the legal authorities quoted for the purpose of settling rules by which the case was to be tried.

It seemed during the progress of the trial, that our Judiciary look upon the relation of Physician and Patient as that of a CONTRACT, the terms of which obligate the former to render to the latter THE ordinary amount of *skill, care and attention* that pertain to the profession of which he is a member. Authorities were quoted to show that this rule applies not only to surgeons but to attorneys, and all classes of mechanics.

No exceptions were taken to this rule by either of the parties to the suit. But it was claimed by the defendant, Dr. Butler, and proven by witnesses, that he made, in addition, a special contract with the plaintiff, on first being called to see him, something like the following :

"Now, Mr. B, you have a bad fracture ; your case is extremely dangerous. I do not profess to be a surgeon; I am only a physician. I will not treat your case at all, unless you clear me of all responsibility for results."

To this Mr. B., according to the testimony, replied :

"I will clear you of all responsibility. Go on and treat my case. I would rather have you than any one else."

In reply to this the plaintiff's counsel quoted legal decisions, to

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show that Dr. Butler could not make a special contract with the patient, by the terms of which he obligated himself to render to the patient any thing less than the ordinary amount of "skill, care and attention;" that such a rule would do away with all standards of comparison and prove positively injurious to the interests of society.

On first view, the general rule, the substance of which we have given, viz., that a physician or surgeon, in undertaking to treat a case, enters into a contract to render to the patient the ordinary amount of skill, etc., will strike most persons as very correct and proper, the interests of both parties being considered. It looks also fair and just, because of its application to attorneys and mechanics; and we presume preachers also, though we did not hear this class alluded to by the counsel or judge. When, however, the matter is sifted a little, difficulties spring up. The word "*ordinary*" at once comes up for a definition. What shall it be? What is to be considered *the* ordinary amount of skill, etc., which the physician or surgeon must exercise as his part of the contract? Is any practice ordinary that is not right? and is there any way of ascertaining what is right, except by comparing the practice in a given case with the precepts and practices of the savans in the profession? If the latter question is answered in the affirmative, and we see no other way of answering it, "ordinary" skill means the skill of the best of surgeons—or, at least, the skill of good surgeons.

It is simply unnecessary to suggest that the enforcement of such a rule would not be very pleasant to the profession. Nine-tenths, or we might safely say ninety-nine one hundredths, of all of the physicians and surgeons in the country, would come short if tried by it.

A rule to be just with reference to the practice of surgeons should be such an one as might be complied with by the profession. The individual status of the surgeon should be regarded as the standard by which to judge of the correctness or incorrectness of his practice. On entering into the contract (as the Judiciary

has defined the relation) to serve his patient, it should be understood that the surgeon simply obligates himself to render to the patient the skill that he himself possesses, no more. Not much possessed, not much ought to be required. The skill, then, of which the surgeon or physician is possessed, should be regarded as the amount and the only amount to which the patient is entitled.

It would be very unreasonable to expect from young men just commencing business, and those situated remotely from sources of information, the same results in practice that are expected from those of learning and experience. The novice does his best, and be the results what they may, he should not be held accountable. The patient's means often will not allow him the employment of the best skill. He has to put up with what he has in his neighborhood, be it good or not so good, and when this is exercised with reference to his case, we can see no reason why he should be dissatisfied with results.

But what protection, it might be asked, would patients, with such a contract, have against "gross neglect," "inhuman treatment," etc.? They need none further than what they have in the absence of all motives on the part of the surgeon or physician to do anything against the welfare of his patient, and in the presence of his ambition to do the very best of which he is capable. The "gross neglect" so frequently set up as a plea for the recovery of damages, is of such rare occurrence that we confess to never having heard it established against any one. Still less likely might be expected "inhuman treatment." Such charges are more frequently, it might be safely submitted, the result of "gross" ingratitude on the part of the patient, and an "inhuman" desire for money.

SPECIFICATIONS OF THE PLAINTIFF.

The "want of skill" and "gross neglect" charged against Dr. Butler, was said to consist in bandaging the leg too tightly immediately after the accident, and in not removing the bandages at the proper time.

There was nothing definitely proven in regard to these charges.

The patient complained of pain in the leg from the beginning, but there was no reason to believe that it proceeded from the presence of the bandage, for it was mostly confined to the seat of the fracture. The coldness and absence of sensibility in the foot were attributed to the bandaging, though these conditions were proven to have been present from the time of the accident.

The leg was bandaged on Saturday, the day of the accident, but owing to sloughing, and the apprehension of mortification, the bandages were removed on the Monday following, the leg afterwards being encumbered only sufficient to keep it in position.

THE JUDGE'S CHARGE.

Judge J. L. Bates presided during the trial, and made in substance the following points in his charge to the jury:

"The plaintiff alleges that the defendant, in the management of his case, did not exercise reasonable, or the ordinary care and skill. The defendant, Dr. Butler, claims that he had a contract with the plaintiff that he would not be responsible for results.

"A physician or surgeon, in undertaking the treatment of a surgical or medical case, enters into a contract with the patient. In the absence of any special one, the general law requires that the physician or surgeon shall render to the patient the ordinary skill—not the highest order of skill, nor the lowest, but something like the average skill of the profession. The general law also requires a reasonable amount of care on the part of the physician or surgeon. These principles are applicable to persons engaged in other pursuits. A mechanic in building a house, or a lawyer in the management of a case at the bar, is responsible for the exercise of reasonable skill and care. The defendant, Dr. Butler, however, claims that he had a special contract, which obligated him only to the exercise of the skill that he himself possessed. This contract the defendant had a right to make; and this contract, if proven—a matter of which you are to be the judges—is the measure of his responsibility, in the case at issue, for surgical skill."

The jury, after a short absence, rendered a verdict in favor of the defendant.

This case affords ground for comment, more than it can receive at our hands just now.

In the first place, the reader will see that a physician, without any cause whatever, has been arraigned before one of the courts of the State, involving much of his time and some hundreds of dollars in the way of expense, without any cause whatever. But this is not all; the annoyance and mortification of such suits, if, as in the case before us, the surgeon establishes the correctness of his practice, any one may well regard as a sore affliction. Dr. B. treated the case well; and, instead of receiving reasonable compensation and the thanks of the patient and friends, has been made to suffer seriously.

This case, too, by being litigated, has taken up the time of our court for two days or more, has taken from their industrial pursuits, for the same length of time, some fifty men and women as witnesses, and introduced a discord in the neighborhood that will not subside for a year or more; and all for what? There was not the shadow of a case for the plaintiff. Was not this fact, too, as patent before the trial as afterwards?

Physicians and surgeons being, as this case proves, liable to prosecution for any and everything they are called upon to treat, may well cast about for resources in the way of protection. It is, as we have remarked, very far from being an immunity, when heavy damages are escaped, when verdicts are rendered in favor of the defendant. With such a contract as Dr. B. had with his patient, and such a charge to the jury as Judge Bates gave, damages in favor of the plaintiff could not in one case in a hundred be obtained. Still the prosecution is the troublesome contingency, and we should like to see some method of disposition. While the case was pending we remarked to a lawyer that we had never heard of one of his profession being prosecuted for mal-practice, and asked an explanation, supposing, in our innocence, that lawyers, as well as doctors, might make mistakes.

"Well," he remarked, "perhaps the reason is this: no one can bring a suit in court unless it be a lawyer, and it would be a very

difficult matter to find a lawyer who would bring a suit against a brother lawyer."

The explanation was satisfactory, perfectly so we thought. Professional courtesy, then, screens the lawyers from expensive prosecutions for mistakes. Have we, we asked ourself, anything in the medical profession equally potent for good? Yes, we have. There is a standing, time-honored obligation resting upon each member of the profession, when he witnesses the getting up of a prosecution of one of his brethren, to use his influence to the utmost for its suppression; and, failing to do this, he should be looked upon as conniving at the misfortunes of his brother.

Being in attendance as an expert in the case before us, our attention was called to the capabilities of members of the legal profession for the investigation of cases involving the charge of malpractice. From what we saw, we were far from being favorably impressed. We have few lawyers at our bar that have even a smattering of anatomy, physiology, or therapeutics, and it may fairly be presumed that such is the case throughout Ohio, and the west generally. Such knowledge has, we believe, not been considered an essential element of education, or, at least, as indispensable to admission to practice. When a case comes forward requiring medical or surgical information, the general practice of the lawyer having it in charge is to *cram* himself; that is, he takes a work on the practice of medicine or surgery, and, without knowing anything of the properties of drugs or of anatomy, swallows as much of it as he imagines his emergencies require. As well might any one expect to be able to solve a problem in mathematics, without first understanding the primary rules of numbers. The lawyer, as a consequence, very often finds himself tangled up, during the progress of the case, with difficulties of his own creation. He asks questions that are irrelevant, or that no one can answer, and construes often the hesitancy of a witness, at giving positive opinions, into a want of candor.

Such being the deficiencies of the legal profession, and we have mentioned them in the most perfect kindness, an improvement

might be made. Either lawyers should study thoroughly the elementary branches of medicine, or physicians should be relied upon more in the trial of medico-legal cases. In Europe, such cases are decided pretty exclusively by judges and physicians.

Remarks by JOHN DAWSON, M.D., *on Granular Conjunctiva, at the City Infirmary.*

This disease of the eyelids has long been described. Celsus noticed it; so did Pliny and Marcellus. But few practitioners, really, of any age, who have not encountered it. It is a process characterized with uncommon suffering, and often proves very destructive to the eye. The photophobia and pain, existing, as is generally the case, for a considerable length of time, give rise also to grave constitutional troubles, and deranged general health.

The disease is characterized by an inflamed appearance of the conjunctiva covering the lids, and the presence of granular prominences in greater or less numbers. These prominences are in some cases but slightly elevated above the level of the conjunctiva; in others, they are so much raised as to give rise to the sensation of foreign bodies between the lid and globe of the eye. Very vascular, the prominences bleed often, and this circumstance is attended with a mitigation, for the time, of suffering. The prominences are supposed to be the villi, or papillæ of the conjunctiva, hypertrophied from inflammation, and when magnified, often present fungiform vegetation sprouting from their apices. These granules—really miniature warts—rubbing against the cornea, keep this portion of the eye in a constant state of irritation. The pain is often intense, and the intolerance to light so great that the patient, with the lids nearly closed, goes about having the head bowed down in order to lessen the quantity of light admitted into the eye. The effect of the attrition between the granules and cornea is very destructive upon the latter. Vascularity and nebulosity at first obtain, the former more at the upper part; then follow thickening, opacity of the coat, and blindness.

Granular conjunctiva often follows the puro-mucous ophthalmiæ,

and sometimes it arises from the mere catarrhal conjunctiva. The cases, however, that have fallen under our observation, have been caused by the contagious inflammation, or Egyptian ophthalmia, a trouble of not unfrequent occurrence in this climate.

We have premised the above remarks simply for the purpose of calling attention to our own experience in the *treatment* of the disease. A disease characterized with the inconvenience and suffering that attend granular conjunctiva, and one that so generally baffles the skill of the physician, should be regarded as worthy of the attention of every one able to shed the least light on its successful treatment. We have had no little experience in its treatment, yet we confess to having had but little success until we adopted the plan of *scarifications.* This has proved equal to the trouble in all the cases in which it has been tried. Cases of long standing, and that had resisted nitrate of silver, sulphate of zinc, sulphate of copper, local bleeding, blisters and general remedies, have commenced yielding at once by scarifications. A very bad case, for example, of several years standing was cured with one pretty thorough scarification of the lids. Such happy results, though, should not always be expected from a single operation. We have repeated it where the trouble was stubborn until the cure was accomplished.

In performing the operation the lids should be everted, and the incisions, with a blunt pointed lancet, made freely over the seat of the granulations, so as to destroy the vascular supplies, thus producing a very considerable discharge of blood.

After the scarifications, the bleeding may be promoted by warm water applied to the eyes.

We hope not to be understood as proposing this treatment of granular conjunctiva as something new. We believe in the maxim, *nil novi sub sole.* We allude to it because it has not received the prominence to which, in our judgment, it is entitled. Weeks and months, and even years, are often consumed in the use of collyria, the crayon of sulphate of copper, general remedies alterative and supporting, with but very unsatisfactory results. Suffering by such means may be mitigated, and some improvement secured.

Still, until the granulations are destroyed, no permanent amendment is very likely to take place. With, however, the destruction of these, results the most gratifying are certain and prompt.

The heroic practice we have suggested for granular conjunctiva contrasts very strongly with what is necessary or beneficial in other ophthalmæ.

American and Foreign Intelligence.

Observations on the Diseases of the Army in the Department of North Carolina.

[From the Boston Medical and Surgical Journal.]

NEWBERN, N. C., May 26, 1862.

I have spoken, in a former communication, of some of the peculiarities of army life and its diseases, as they occurred to me in Camps Stoneman and Griffin, in Washington and in Virginia. My labors in that field were abruptly closed near the end of December last, by a pretty severe attack of typhoid pneumonia, which confined me to a sick room in Philadelphia during the month of January following.

Assigned as Brigade Surgeon to the Department of North Carolina, my observations, since the latter part of February last, have been directed to the army as commanded by General Burnside, and embrace the period of nearly three months, including, in this time, three successful battles, to wit: those of Roanoke, Newbern, and Fort Macon.

On the Potomac, I was limited to the subject of land force, and particularly to that of cavalry, being confined, in fact, almost entirely to one regiment. The army here unites the naval and land forces together. Indeed, it is a peculiar organization, well adapted to attacks on fortifications near the seashore. At first there were no cavalry in the force, and Roanoke was captured without them; so was Newbern. Since that time, Captain Belger's Battery has been acting as cavalry for picket duty, and additional regiments have been added to the Department. The corps d'armée embraces, therefore, at present, nearly all the forms and weapons of modern warfare—infantry, cavalry, artillery, gunboats with their mortars, etc., all complete. It will be remembered, also, that my observations on the Potomac were made in the months of September, October, November and December; and that the spring months, March, April and May, have been the seasons of our campaign in North Carolina.

The district of country in Fairfax county, around Fort Griffin, is rolling or undulating, and, as we approach the Potomac, somewhat hilly. The land is old, and some of it in a high state of cultivation. On the other hand, the surface of the ground here at Hatteras, Roanoke Island and Newbern, and along the Southern coast generally, is flat, sandy and swampy, and well calculated to produce bilious, remittent and intermittent fevers. If, as some say,

> "An ague in the spring
> Is medicine for a king,"

It is my opinion that kings might get plenty of such medicine by visiting this region. An intelligent lady in Philadelphia informed me on my inquiry (she whispered it in my ear), that the climate about here was a "d—l of a climate." General Burnside and his command found this to be the fact during the months of December and January, and I can bear testimony to its very blustering character at Cape Hatteras and Roanoke during March and April.

So much for the climate. Vegetation here is, of course, luxuriant. Forest trees are chiefly of the turpentine pine; while cotton, corn, tobacco, potatoes, wheat, rye, oats, figs, grapes, peaches, apples, pears, apricots and plums, grow in abundance.

Diseases.—The fevers which I have observed, in camp and among the inhabitants, appear to be of four kinds.

First. *Typhoid Fever.*—This pervades the shipping, both the gunboats and transports; and when not fatal, often leaves the system in great prostration, condemned to a long convalescence, which is often in danger of a relapse. The petechiæ over the abdomen and elsewhere, thought by some to be characteristic of the disease, have not been as frequently observed as I expected. The diarrhœa symptom is not universal. Congestion of the lungs is very common, and sudden deaths from enteric hæmorrhages, during apparent convalescence, have frequently surprised and astonished the attendant surgeons. The typhoid tendency, as it is denominated, masking other diseases "with the pale cast" of its insidious poison, is a very general condition, and many poor fellows, who clung to the shrouds at Hatteras, and were buffeted so long by its merciless storms, who afterwards braved the fight at Roanoke, and rose from the bed of languor to contest the hard-won battle at Newbern, have since been in a more or less typhoidal condition. Some of them, on being wounded, were unable to bear the wear and tear of a long convalescence, and are deposited at Roanoke, while others have died at Newbern, and still others have been enabled to recruit by returning for a few weeks to the pure air of their homes, and the cheerful comforts of their own firesides.

Second. *Typhus Fever.*—This form of disease has been not unfrequent, and some cases, both on Roanoke and at Newbern, have exhibited a malignancy truly appalling. The cases in which I have remarked this more particularly, have been stout, fleshy young men, who have sunk into a state of absolute decomposition

in a few hours. I remember one case, which was brought into one of my hospitals at Roanoke, where the cellular tissue, at the base of the neck, was filled with air and serum, and the skin of the feet and legs up to the knees was purple; the boy was pulseless, stertorous and insensible when he first came into the hospital. I have seen a few cases of the same kind in Newbern.

Third. *Bilious Remittent.*—This I believe to be at present the prevailing type of our diseases. Jaundice during life, with other symptoms of the disorder, and a diseased liver found on a *post mortem*, are some of the proofs which may be adduced. Indeed, Dr. Tull, of this city, who has practiced here for more than twenty years, informs me that that is the prevailing type of the diseases of the district. Frequent symptoms of biliousness, which the officers and men exhibit, together with the marked beneficial effects of calomel, also indicate this tendency.

Fourth. We have pure cases of *Intermittent Fever*, which are usually controlled by the common anti-periodic remedies.

I have thus indicated the four different forms of fever which appear to be prevalent among our troops at the present time. The mortality from these fevers has not as yet been accurately calculated, but I am under the impression that it is not large. The liberality of the General in allowing his men to return home for a short time when sick or wounded, has a beneficial effect upon those who remain; while the well-ventilated and cleanly hospitals, good nursing and abundant supply of the sick man's comforts, save many lives which would otherwise be lost.

I have spoken thus far chiefly of fevers as the diseases of the camps. We have also a good many cases of rheumatism, and a few cases of diarrhœa and dysentery, which may be denominated "camp diseases." The apparent breaking down of the constitutions of young men from the New England States, especially where there was a tendency to pulmonary disease, is a phenomenon which has surprised and grieved me. Many of these young men are from rural districts, farmers' sons, and suffer doubtless, privately, from nostalgia. The undeveloped condition of the system, with some private vices, may be adduced as additional causes of this breaking down.

Treatment of Fevers.—There has been no one treatment adopted generally for typhus and typhoid fevers in this division. The expectant and stimulant have been the most common. The surgeons have relied chiefly upon what the ancients call the *naturales;* the use of whisky punch, carbonate of ammonia, or turpentine—very little, however, of the two latter articles. Eberle's strong recommendations of the carbonate of ammonia seem to have been forgotten, and "Wood on turpentine" has been left to the mercy of caricaturing students in the halls of the "oldest medical institution" in the United States. The profession in the army, here, seem to be entirely at sea, no two of them appearing to agree on any plan of treatment. They appear to be like the Parisian philosophers, who anxiously inquired of Franklin what religion he

professed, and found, much to their satisfaction, that he professed none. I have felt much dissatisfaction with this condition of practice, and have requested one of my colleagues to try, in some cases of pulmonary and cerebral congestion, *feelingly*, the now exploded lancet. His reports, thus far, have been favorable. In some cases of stupor and cerebral congestion, I have suggested the resort to one or two large doses of calomel, followed by Dover's powders and whisky punch. These cases have done well also; and lastly, at my request, the calomel and quinine practice, ten and ten, has been resorted to where bilious remittent symptoms predominated at the beginning. This treatment seems still to hold its own in this district among the resident practitioners.

I remember well when Dr. Parry from the valley of the Mississippi, many years ago, then a student in the Jefferson Medical College, threw a bomb shell into the profession in Philadelphia, by reading his thesis before the Medical Society, and quietly asking "what shall I do with the pulseless, moribund cases of congestive fever of the Mississippi?" Prof. Meigs, in his usual enthusiastic and fanciful style, recommended "the lancet—the lancet—the lancet!" It, he said, would relieve the overloaded internal organs; it would take the weight from off the nervous centres; it would allow the *endangium* to produce healthy blood. In a word, if the patient died, like that of the pupil of Dr. Sangrado, it would be for want of bleeding! Dr. Wood was astonished and dismayed at the doctrine, and, assisted by the brilliant but eccentric Jackson, both of the University, castigated the professor of the Jefferson Medical College most unmercifully. Professor Wood did not approve of bleeding at all, except in rare cases, and "would treat the case according to circumstances." Professor Jackson gave a brilliant dissertation, which lasted part of two sessions of the Society, on the then newly-published cell theory of Schwan and Schleiden, while Dr. Parry stated the western practice to be, in some cases, large doses of calomel, in others large doses of quinine, while others combined the quinine and calomel practice in one. Professor J. K. Mitchell took hold of this practice at once, enforcing it with his usual eloquence and point, and illustrating it in public and private practice during the rest of his life.

According to my observation, the same diseases exist on the southern coast of North Carolina, as those mentioned by Dr. Parry. Now what shall be our treatment? Will the profession of New England tell us what we shall do? Shall we use turpentine with Wood, calomel and quinine with Mitchell, or the lancet with Meigs and Rush? The hardships of the winter campaign at Hatteras, Roanoke and Newbern, have battered many of our men to a condition at least as low as that of the natives and negroes. Shall we fear this real or apparent prostration, and shun the lancet—the almost universal practice over our country for some time past? Shall we forget Hamilton's eulogies of cathartics? Shall we attempt to destroy the malarious poison in the blood by immense doses of quinine? Shall we stimulate with carbonate of ammonia,

or piddle along with the turpentine emulsion? or shall we, in the language of one of our surgeons, "sock into our patients large doses of whiskey punch?" Or what shall we do?

In surgical practice, we are taught "*anceps remedium melius quam nullum.*" Is the lancet that doubtful remedy? Or is it right to see our patients die from the very beginning of the disease, without attempting to do something for their relief?

Respectfully your obedient servant,

JAMES BRYAN,
Brigade Surgeon, Burnside's Expedition.

We are kindly permitted by the Surgeon-General, to print the following from the report of Dr. Sargent, recently returned from Virginia:

WORCESTER, June 6, 1862.

To the Surgeon-General:

SIR,—I reached home this morning, after arduous service in the care of seven hundred and fifty wounded men from White House to Yorktown and Annapolis; and I lose no time in reporting to you.

I wrote you last from White House, giving you the names and regiments of the Massachusetts men sick there. On Wednesday, the 28th May, we made a second tour of the Field Hospital at White House (Dr. Mack, Dr. Thorndike and myself), and found all our surgeons hard at work, and were glad to see the results of their work; for the thirteen or fourteen hundred sick there (the number is constantly varying by arrivals and departures) were left to their care alone, the Brigade Surgeon (Dr. Baxter) and his assistant being occupied exclusively in general business. The tents were mostly floored, and the comfort and condition of the patients much improved. And yet the number of medical attendants was not sufficient for any record whatever to be kept of diseases or of treatment—the name, and the arrival and departure, alone appearing on the register.

On Thursday, May 29th, having previously made arrangements with Dr. Tripler that we should be telegraphed for, in case of need, we took the boat to Yorktown, where, as my former report stated, eleven of our surgeons had been ordered to report. Dr. Wheaton, of Providence, R. I., is Medical Director here, and is a man of a great deal of experience and efficiency in the army, having served as assistant surgeon in the war of 1812–15, and as surgeon throughout the Mexican war, besides having served in this war from the beginning. He treated us with a great deal of politeness, professional and social. There were about sixteen hundred sick at Yorktown, many in houses, though many also in barrack hospitals and some in tents. The great majority here were sick with typhoid fever; and the aggregate aspect of so many sick with one disease is picturesque in a most extraordinary manner. Of all this number, there were only ten or twelve patients from

Massachusetts. We were at Yorktown from Thursday noon to Saturday afternoon, when we took the boat for Fortress Monroe, arriving at evening.

On Sunday morning, June 1st, immediately after breakfast, Dr. Cuyler brought me a despatch, sent from White House through Dr. Wheaton at Yorktown, "directing Drs. Sargent, Mack and Thorndike to proceed to White House immediately." So we took the boat which was just ready to start, and returned to White House, arriving at about 5½ P. M. Reporting at once to Dr. Tripler's quarters, we were met by Dr. Smith, Surgeon-General of Pennsylvania, who told me that the despatch had issued from him, and that he wished us all to go on board the Commodore immediately, and help take care of some wounded men from the battle then just closed near Richmond. We went in at once, and were soon swung into the stream, where we lay until morning, rendering every assistance in our power. In the morning, Dr. Van Tagen, the surgeon in charge, showed me a despatch he had just received, ordering him to leave one hundred and fifty of the wounded men at Yorktown, and take the rest to Annapolis. Stopping at Yorktown again on our way, we found that Dr. Wheaton had received large accessions to his number of patients, so that he had been obliged to pitch one hundred and fifty hospital tents. Of the patients whom we left there, thirty-nine were North Carolina troops, prisoners.

We arrived at Annapolis Tuesday morning, the 3d, and were occupied most of the day in discharging our patients. Tuesday evening we went to Baltimore. On Wednesday we went to New York, where we parted yesterday, Dr. Mack remaining for a day in New York, Dr. Thorndike going home by the Fall River route, and I by the Norwich.

Such is a current history of our mission and service. Few men ever worked harder than we did between White House and Annapolis. The patients were mostly of Pennsylvania and New York regiments.

I think it may not be without interest to you that I add something in the way of review. * * * * * * *

Of the large number of sick and disabled on the Peninsula, the cases of fever, dysentery, rheumatism and scurvy are incidental to the necessary exposures of the siege before Yorktown. But the number of cases of disability which existed before that siege, and many of which should have been foreseen and prevented at the time of enlistment, is extraordinary. Persons are enlisted who are over age and who are under age; feeble old men of sixty, and feeble boys of sixteen. At White House I found two old Germans from Boston, each between fifty and sixty years of age, laid up together (possibly for company), and one of them with asthma. This man had not been able to march with his regiment for weeks, and had been waiting for his discharge papers since April 9th. He was inspected and passed by a Boston physician. The cases, I understand, are not very rare in which persons with some disability pass

inspection in one city, get pay and secure bounty, are put on the sick list, procure their discharge, and then go to another city to go through with the same process over again. Fathers and sons enlist together, and are laid up together, as a matter of business. Dr. Tripler told me that epileptics were enlisted, and that he even found one man deaf and dumb—though, he said, he believed he was only enlisted to cook. Yet here, even, there was obvious inconvenience. Now, when we consider that every soldier costs the United States not less than five hundred dollars a year, it is clear that it would be worth while to exercise more care in the enlistment, paying competent inspectors price enough to support them in rejecting men, instead of leaving this important work to the gratuitous service of chance physicians.

Also, we have now got to where our medical staff is not sufficiently numerous, under the accumulation of sick and wounded. I am afraid, also, that it is not always competent; though of this I have no absolute personal knowledge, Two assistant surgeons to a regiment would now be much better than one. "Contract surgeons" have rather an indefinite position, and are not likely to remain long enough to acquire such experience as to make them useful in the service. Volunteer surgeons—and in this category I place myself and my immediate colleagues—must present themselves with great discretion not to produce dissatisfaction. They are looked upon rather as an anomaly and an inconvenience, and may possibly be suspected of presumption and self-sufficiency. I saw nothing whatever of this in the treatment of us; and we were careful to appear constantly as ambassadors, and, in some manner, an escort to the medical gentlemen whom we introduced; while we also offered our services in any manner whatever. * * * If I had known that the Massachusetts 22d was then without surgeon or assistant, I should have offered myself at once.

In regard to hospitals, those at White House are very bad and very crowded. Those at Yorktown are much better, and Yorktown itself is high, and I presume healthy. Those at Annapolis are the best I ever saw; the fine buildings of the Naval School, chapel and all, being appropriated.

Yours truly, JOSEPH SARGENT.

Clinical Notes on Intemperance and its Prevention. By ROBERT DRUITT, M. R. C. P., London.

I have hitherto spoken of the bodily sensations which lead to intemperance; but the mental are of infinitely greater consequence. And here let me notice the most cruel and unreasonable neglect with which minor mental affections are treated. I speak not of what is formally called "insanity," but of the nervous wretchedness, the bad spirits, the dejection and groundless fears of the feeble and hypochondriacal. If a woman have a pain in the side, or a spot on

the skin, her husband will immediately seek medical relief for her, though her bodily sufferings be but slight, and her mental none at all. She may be essentially as cheerful and happy as ever, spite of a little pain, which she readily bears. But let the same woman be ill in that which constitutes her very inner self; let her thoughts be gloomy, hopeless, and self-tormenting, so that her life is as miserable as if she were a prey to remorse for the most grievous crimes, and then what is done for her? Either she is despised as a fool, and told so, or she is argued with; just as if any one would entertain irrational fears if they were capable of being argued away. Or she is scolded for sinful despondency, and told that she is wicked to despair. Or she is told to drink; to have a glass of port wine when she feels low—or all these things may happen to her in turn, till, at last, the husband coming home unexpectly some day, finds his wife drunk! Christian friends then wonder how a lady could so degrade herself; all the blame is laid on the victim's head, and not one word said about those who have so cruelly neglected her, through utter ignorance of mental physiology, and blindness to the things going on under their eyes.

A man lately brought his wife to me, saying, "Really, sir, I don't know if it is of any use to ask you to see her; there is absolutely nothing the matter with her, but she is such a fool. She is moping and crying all day, with nothing on earth to cry about. She has every comfort that a woman can have, and yet is never happy, though I keep telling her how wicked and foolish she is."

I once saw a lady who had been found out in a drunken fit. Her relatives were sent for. Her mother and an aunt came; the former thrashed her with her fists; the latter pounded her with texts of Scripture, such as, "The wicked shall be turned into hell," and about "a lake of fire reserved for liars and drunkards," etc., and this to a poor wretch, who fled to the gin bottle for relief from inward misery that was uncared for by those about her, and so timid, as she told me, that she had scarcely courage to give an order to her own maid. From what I have seen of the secret solitary drinkers, it is in vain to attempt to terrify them with notions of punishment, present or future; there is no state that they can conceive of more wretched than that which exists within them, and for which they seek a short respite in drunkenness.

Mental suffering is far worse to bear than bodily, and it is almost as common, especially amongst the educated classes. It is really the source of that disposition on the part of educated and refined persons to encourage quacks, of which regular practitioners complain. When regular practitioners cease to utter the formula, "Madam, I assure you your complaints are purely nervous," and with that formula to dismiss the case as unworthy of notice, then they will have a right to complain that their patient seeks from a quack the solace which they will not stoop to administer.

Of the forms of mental suffering, short of what is called "insanity," yet frightfully common, more distressing than any bodily illness, more incurable, and most pernicious—in tempting women to

drink, I have already mentioned *nervousness*. The best description of it was given by Charles Lamb. "Business," he says, "which I once used to enter upon with some degree of alacrity, now wearies, affrights, and perplexes me. I fancy all sorts of discouragements, and am ready to give up an occupation which gives me bread, from a harassing conceit of incapacity. The slightest commission given me by a friend, or any small duty which I have to perform for myself, as giving orders to a tradesman, haunts me as a labor impossible to be got through." To the mental are added bodily symptoms of the same sort, as the shaking hand and unsteady sight. These symptoms may be caused by bodily weakness alone, by worry of mind, by use of narcotics, and more especially of alcohol, by green tea, and equally by too much sleep. The hours during which they are most tormenting, are between early morning and the mid-day meal. The difficulty in relieving them arises from the difficulty of coercing a feeble stomach, reeking with the dregs of yesterday's mal-assimilation, to receive and digest food early in the day. Hence, wine and spirits are fatally tempting. Of this again, when I speak of treatment.

Whoever lives without risk of suicide, has passing through his brain during waking hours an easily flowing succession of thoughts, the result of which is a comfortable degree of self-reliance, self-satisfaction, and self-respect. But illness, anxiety of mind, and self-reproach at misfortunes unavoidable or not, may enfeeble the brain, and produce a train of thought which is positively painful, and requires effort to bear patiently. They next enfeeble those powers by which we distinguish between matter of fact and matter of imagination. There is many a case of ill-nourished brain seen in daily practice, between which and melancholia the line of demarcation is not well marked.

In May, 1854, a medical friend called on me, bringing with him the last volume of the Medico-Chirurgical Transactions, which he opened, and asked me to look at a paper by Dr. S. W. J. Merriman "On Inversion of the Womb." He looked as wretched as possible, and told me that a very important patient of his, whom he had recently attended, and whose good word was of the highest consequence, had met with this accident, and that he was afraid to reveal it, but that out it must come soon, and that the patient would die and himself be ruined. Of course I condoled with him, and asked particulars. But the odd thing was that I could get no particulars; the inversion had been taken for granted. So I advised my friend, instead of going and confessing to the husband, to take an opportunity of examining the patient, to find whether the womb were really inverted or no. He did so, and found that he had been disquieting himself about a mere fiction of the imagination. He had been suffering from loss of rest, irregular meals, and great anxiety of mind, and had got his brain into so feeble a state that it was enslaved by an hallucination. Rest, good living, and wine speedily cured him; but it is a singular fact, that two years later he got the

same crotchet into his head respecting another patient about whom he had been much harassed.

This case may be an example of the morbid fancies which haunt the brain of the wretched hypochondriac, unable to weigh and dismiss them with a clear judgment. The commonest is the notion that other persons' words and actions are intentionally offensive. In such cases, whether the evil be great or little, alcoholic liquids strengthen the judgment, change the current of thought and render it agreeable, beget a comfortable sense of self-respect, and enable the patient to bear his woes. Hence, the use of them may be, first, a dangerous remedy; next, an inveterate aggravation of the original malady.

The process by which *grief* leads to drinking is short and easy as the path to Avernus. There is no doubt but that grief—the condition caused by the news of some great calamity—produces effects on the brain of a physical character. The sufferer feels a sudden rush of blood to the head; a faintness; a dull pain; a sense as if the head would burst and the eyes start from their sockets; a stunned feeling, followed by a soreness; and inability to control the thoughts, which roll round and round in one distressing circle, without the power to dismiss them and entertain others. Between a man who receives shocking news and one who receives a blow from a stick, there is this difference, the physical injury is over at once; the mental persists and may grow in virulence. To the mental torture is soon superadded bodily illness; and the effects of grief which I have seen have been in one of these forms.

There may be, first, the effects of exhaustion—of the great wear and tear of the brain. This was well described to me some time ago by a widow. Intense occupation in nursing a sick husband had ceased suddenly with his death. "When the house is shut at night," she said, "and everything quiet around me, then my sad thoughts come pouring down upon me, and go on, round and round, and over and over again. After a time, as I lie tossing about, a most horrible faint sinking comes over me, as if my heart and inside were clean gone, and I was sinking into the earth, bed and all. Then I must have brandy. I get out and take it, and sleep and feel better; if I do not, I am good for nothing the next day."

The second effect of grief is shown in those disorders of the blood which seem to result from admixture with it of organic matter, the result of nervous wear and tear. The usual symptom is sick headache; stunning headache, with vomiting of bile, or of acid stuff, or both, and large elimination of uric acid by the kidneys. Boils notoriously may be induced by grief; so may gout. I once was told by a man that a fit of vexation from disappointed love had settled in his nose and produced carbuncle there. It was quite true. There is much reason, too, for believing that grief may conduce to cancer.

Thirdly, there are more or less permanent disorders of the nervous system. There is a form of hysteria in which pains are, as

vulgarly said, "similated." I recollect seeing a young lady bathed in tears, and complaining of violent pain in the side. She expanded her chest in such a way as to show that the cause of pain was not seated in the side; but the mind was deeply wounded; she was ill; sympathy was a necessity to her; the pain was but a reflex effect of a broken heart. This, as I humbly conceive, is the key to the obstinate, inscrutable, and apparently utterly abnormal pains and local complaints of hysteric young women. As a sailor will feel pain in the legs which were cut off years ago, as disease of the nervous centres may cause pain in the extreme nervous branches, so a mind deeply wounded, especially with a grief that must be hidden, produces some outward local pain.

Hence the obstinate pain in the knee, or ankle, or spine, the spasms, and other symptoms of severe hysteria. I have seen cases, from long-hidden grief, of utter fatal atrophy of body and imbecility of mind; such patients might have been saved by a greater use of wine, under medical direction; but yet might probably have become confirmed intemperates. Many a man lives as an intemperate, who, but for alcohol, would have died. In counting up the evils of alcohol, it is but fair to subtract from them those which it finds and alleviates.

Grief fills the mind with images which are positively noisome. *Stagnation*, in which the mind is simply not supplied by any images at all, is as bad or worse. Such is the condition of persons of middle age who have lost hope; whose schemes of life are blighted; who have failed in their calling, and are too old to choose another. Such are the physicians at sixty who hate the profession, and wish they had gone to the bar; such the barristers who "always felt that they had a taste for physic;" and the soldiers who say that the service is clearly going to the devil, and that only incompetent fools get promotion. Such are, too, many of the inmates of almshouses, refuges, and colleges for decayed professional men or their widows. Such are many of the single women of limited income who live in those protestant convents, the boarding-houses that abound in the suburbs of London. Such are the shepherds in the Australian bush, who, after months of monotony, must go and get drunk, to save their lives by a little excitement.

Of the effects of anxiety of mind, the following may be an example. A patient writes: "I received intelligence which caused me intense anxiety, which lasted several days. Absorbed though I was, I could not help noticing my bodily sensations. After a fit of more anxious musing than usual, I had such singing in my ears, giddiness, etc., feeling as if all my flesh was asleep. My feet felt partly as if they had 'pins and needles,' and partly as if there were wool inside the soles of my feet. And such a craving for food and drink!"

But there are certain perturbed states of the nervous system which directly lead to drinking, and which seem not to be engendered by outward circumstances, but by some congenital defect in the original formation or in the development of the nervous system.

Such are the cases which may be called "primary hysteria," and (with certain reservations) "moral insanity." There are young persons of either sex, whose nervous system is in such a state that the ordinary occupations and surroundings which give happiness to others, give none to them. They are wretched and dissatisfied, and seek for some additional means of excitement. That excitement is found in two modes—in tormenting others, and indulging themselves. There are children who from tender age do the most malicious and mischievous acts, merely to gratify themselves. Such was a young lady who, when on a visit, hid the dressing-case of another visitor; such are the girls who set fire to houses; and others, of whom a good example may be cited—the unfortunate and notorious girl to whom the name of the "Female Jesuit" was ignorantly and slanderously given, and whose history was published with ludicrous simplicity by a miserable preacher upon whom she had quartered herself, and whom she deluded and tormented for months. Not long ago, I was consulted about a young lady, rich and good-looking, but restless, always craving for excitement; able to have almost every indulgence that money could procure, and to travel wherever she liked, yet secretly a drinker.

Here I must stop for the present. Let me sum up by saying, that as of bodily ailments, so of the minor mental perturbations met with in common life, there is a vast amount whose natural tendency is to seduce into intemperate habits, because alcoholic liquors give temporary relief. Such mental ailments are too often treated by scolding, argument, or *le prêche.* They ought to receive the most refined and careful medical attention; and if they did, many a case of suicide, insanity and drunkenness would be prevented.—*Med. Times and Gazette.*

The Domain of Medical Police. (Abstract of a Paper read before the New York Sanitary Association, February 6, 1862.) By LOUIS ELSBERG, M.A., M.D.

[NOTE.—The following sketch accomplished, it is believed, some little good by presenting at one view the extensive, and in this country hitherto but little cultivated, field of Medical Police. It is published with the hope of extending its usefulness *pro bono publico.* It must be looked upon but as a "Bird's-Eye View" of a Domain to the extent or details of which the writer has contributed scarce anything. In some introductory remarks it was stated: "The general survey—though hastily and imperfectly performed, without many claims to originality or profundity, and prepared under the pressure of other duties—is intended to furnish *systematic headings* for the various questions that arise; *shelves,* as it were, upon which you might arrange your knowledge in systematic order; and if the attempt prove a failure, I shall find consolation in view of the vastness and intricacy of the inquiry. Exhausting

nothing, I intend to touch upon many things. I shall often but indicate the various points for consideration without 'passing judgment,' and again, state conclusions without giving the course of reasoning by which they have been arrived at, or the arguments by which they might be sustained. I intend, briefly, to run over the volume as it were before us, *not* in its separate pages, but by its preface and table of contents."]

Medical Police—*politia medica*—is an institution necessary to the security and perpetuity of society; a necessity resulting, indeed, from the very constitution of society. It is an integral part of State polity. To obtain a just idea of its nature, objects and limitations, it is requisite to seek primarily clear notions on police in general.

The word *police* is derived from the Greek *politeia*, which Anson defines: the relation in which a citizen stands to a State; the condition and right of a citizen; and again: the life and business of a statesman; hence, government and administration. It is employed to designate those regulations and institutions of a State, a city, or a country district, which have for their object, to secure the maintenance of its internal peace, good order, safety, comfort, cleanliness and health. It is also applied to the body of men or the "civil force" by which the police regulations are executed and enforced.* In contradistinction to courts of law and justice, it has been said by Schürmeyer,† that the latter are concerned only with illegal human actions, while police is concerned principally with interference with the rights of citizens from force of external circumstances and with enforcement of the laws. A paragraph in the Act of the Legislature of our State, passed April 10, 1860, in reference to the Metropolitan Police (though it contains some points irrevalent to our purpose), defines the duties of Police so fully that I quote it entire. "It is hereby made the duty of the Metropolitan police force, at all times of the day and night within the said Metropolitan police district, and the members thereof are accordingly hereby thereunto empowered, to specially preserve the public peace, prevent crime, detect and arrest offenders, suppress riots and insurrections, protect the rights of persons and of property, guard the public health, preserve order at every primary and public election, remove nuisances existing in public streets, roads, places and by-ways, repress and restrain disorderly houses and houses of ill-fame; to arrest all street beggars and mendicants; to provide a proper police attendance at every fire, in order that thereby the fireman, fire-engines (persons) and property exposed may be suitably assisted and protected; assist, advise and protect emigrants, strangers and travelers in public streets, or at steamboat and ship landings, and railway stations; enforce every law relating to the suppression and punishment of crime, or to the ob-

* See Blackstone, Bouvier, Webster, Worcester; also, David Booth's Analytical Dictionary of the English Language, London, 1836.

† Handbuch der Medizinischen Policei, Erlangen, 1856.

servance of Sunday, or regarding pawnbrokers or mock auctions, or emigrations or elections, or gambling, or intemperance, or lotteries, or lottery policys, or vagrants, or disorderly persons, or the public health, or any ordinance or resolution of common councils, or town or village authorities within the said district, applicable to police, health, or criminal procedure."*

It is interesting to know that precisely the same language is used in the Act of the "Congress of the United States," passed August 6, 1861, "to create a Metropolitan Police District of Columbia, and to establish a police therefor."†

According to Mohl,‡ Police embraces all the various measures and institutions which, by the exercise of the general powers of the community, aim to prevent or remove those external influences that interfere with the lawful actions, enjoyments, and possessions of individuals, which the individual cannot wholly or satisfactorily prevent or remove, without a violation of the rights of others or a disturbance of the peace of the community.

From this we may paraphrase the definition: Police is that exercise of the general supreme power of a community which tends to make inoperative the causes interfering with the rights of the individual, and which he cannot remove without a violation of the rights of others, or of the peace of the community. The science of Police is the systematically arranged knowledge of the various means used for this purpose, and of the principles on which they are instituted and the purpose effected; and indicates what authorities must exist, how they should be organized, and what programme of business they should follow.

In the discharge of its duties, the police occasionally encounters conflicting interests; and as the objection has often been made to the institution of *medical* police, that it would interfere with personal rights, the subject of compulsion may perhaps at this stage of our inquiry profitably engage our passing attention.

The right and duty of the police to employ force when necessary can, in general, not be doubted. The only question that can arise is: Can the benefits of a particular institution be fully realized by one individual, whether or not another avail himself thereof, or are its beneficial results lost to the entire public, unless each individual in the community conform to it? If the former be the case, compulsion is both wrong and inexpedient, for we may admit no one can well be compelled to accept benefits designed only for his own good, or to protect only his own person or property. Neither can it be left, however, to the will or caprice of an individual, or even of many individuals, whether or not the remainder of the community shall enjoy certain valuable and necessary protection

* Laws of New York, 1860, ch. 259, § 29.

† Statutes at large and Treaties of the United States of America, 37th Congress, 1861, chap. 62, section 5th.

‡ Die Policeiwissenschaft nach den Grundsatzen des Rechtsstaates, Tubingen, 1844.

or not; and it is a principle, universally admitted by jurists and publicists, I believe, that the will, necessities, or rights of individuals can never stand in the way of the rights, necessities or will of the community.

The limits of compulsion depend principally upon the resistance; and the means of compulsion upon the nature and importance of the protective institution to be established. The more important and indispensable to the community the object to be attained is, the greater may be the force, amounting, according to circumstances, to loss of privileges, property, liberty, and even life; and all these elementary principles are justly applicable to regulations for the protection of public health.

As far as police is concerned with the physical condition (and especially the health) of the community, it will be seen on a moment's consideration that, in order to attain its object, it requires the possession of medico-physical *knowledge;* and in view of our previous remarks on police in general, we may now define "Medical Police" to be that science which teaches the application of every branch of medical knowledge—or more widely still, of physical knowledge—to the purposes of police.

Medicine bears to police, as medical police, a somewhat similar relation as it bears to law as medical jurisprudence. And the difference, too, between the latter or legal medicine, *medicina forensis*, and *politia medica* is exactly that between law and police. Both, medical police and medical jurisprudence, are embraced in the term State medicine, *medicina publica* or *medicina politico-forensis*.

The *domain* of medical police admits of a division into three departments: (1.) Preservation of Public Health; (2.) Removal of Disease; (3.) Administration of Medical Affairs. These three divisions link, at many points, however, closely into each other. The first embraces not only the maintenance, but also the promotion or improvement of the existing sanitary condition of the community, primarily therefore the exclusion of the causes of disease; the second includes the re-establishment of the perturbed state of public health, specially therefore the cure of diseases; while the third embraces the totality of the various laws, regulations, and institutions referring to medicine.

A system of administrative medicine can be established for a community only after long experience of the proper working of a medical police, and though required by us in order to define the sphere of action of the public health officers, I can at this moment only say, on this head, that the provisions of the Metropolitan Health Bill, emanating from this Association, and now before our Legislature, form, in my estimation, the foundation and outlines of a system which, properly followed up by officials and the medical profession, and extended to medical jurisprudence, gives a reasonable hope that the entire regulation of medical affairs among us will gradually but surely become what it should be.

As to the second division, *i. e.*, the Cure of Diseases, it is plainly the duty of the State, *i. e.*, of medical police, to take care that the

conditions be not wanting requisite for the restoration of public health. It must ensure, therefore, the existence of the necessary means of cure for the *optional* employment of the individuals, referring both to authorized persons and to drugs, pure and in good order. Besides ensuring this supply for optional use, the community must, in all cases where either from poverty or from other personal and local circumstances the sick individual is incapable of providing himself with the remedial aid he needs, assume to do this also for him. Furthermore, it is its duty in epidemics, to publish, as far as expedient and practicable, for the instruction and benefit of the public, any dietetic or other rules of regimen which may be instrumental in alleviating the disease.

The particulars of this division of medical police do not, it is true, fall within the scope of this Association, but, for the sake of completeness, I crave your attention to a brief enumeration:

(1.) To have a competent medical *personnel*, the community requires institutions for its education, and it is the duty of the State to charter, and through the medical police surveil these with solicitous care. It should regulate the admission of students, require a standard of preliminary knowledge, prescribe and facilitate their course of study, and test their competency before licensing to practice. In licensing, specialties, as that of midwives, dentists, oculists, etc., must not be overlooked. The question of the expediency of establishing a tariff of fees, either for private or public services, or both, reclaimable by law, might arise; and certainly that of transgression of license and suppression of quackery must claim attention.

Instruction of nurses or other attendants and assistants, might also become a subject for consideration.

(2.) The care for proper remedial *matériel* involves licensing of apothecaries, regulation of the sale of poisonous and secret or patent remedies, and inspection of drugs, medicines, and perhaps also of surgical instruments. The question of establishing here, too, a tariff of prices, with limitations if necessary, might also be considered.

(3.) During the prevalence of an epidemic it would be the duty of the medical police to make any extra provision for the treatment of the sick, necessitated by the circumstances.

(4.) Whenever a sick individual is supplied with the aid he requires without its assistance, medical police must not interfere, but it is its duty to procure proper medical and other attendance, and provisions when, from any cause whatever, the sick cannot otherwise be provided for.

[For the care of these sick, the following means may be used: (*a.*) General public hospitals; (*b.*) Special hospitals or institutions for the relief of particular maladies, as asylums for the insane, the imbecile, the blind, the deaf and dumb, invalid houses or hospitals for incurables, women's hospitals, children's hospitals, orthopedic institutions, etc.; (*c.*) Dispensaries, or places to which the needy sick can go for advice and medicines; and (*d.*) Dispensary out-

door departments, with their district physicians, or physicians for the poor, specially employed by the medical police authorities to visit the sick at their homes.

Either of these means may be partly or wholly supplied by private charity, but medical police must, whenever necessary, encourage or assist their establishment, or else establish them itself; and in all cases it must exercise over them a certain supervision.]

(5.) It is the duty of medical police to prevent the interment of persons only apparently dead. (That persons *have* been buried while really alive, there can be no doubt.) Certificates from physicians, special inspection and investigation before granting permission for burial, and the keeping of all bodies for a certain length of time in dead houses, before interring them, are among the precautions to be considered. (The duties of coroners are closely related to this subject.)

(6.) Provisions for rescue in apparent death, and from accidents, fall also within the sphere of duty of medical police. Wherever deemed necessary, therefore, it should provide both means and instruction as to the popular and immediate aid to be given to the drowned, frozen, strangled and suffocated; to persons fallen from heights, or bitten by suspected dogs, cats, etc., or poisoned in any way, or scalded or burnt; to the asphyxiated, from intoxication, foreign bodies in the air-passages, etc., etc.

We now come to the consideration of what I made the first division, *i. e.*, "The Preservation of Public Health," which forms, PAR EXCELLENCE, the domain of medical, or, as it is (in this connection) also called, *Sanitary* Police.

The most important and fertile source of *effective public hygiene* is thorough, minute, and extensive SCIENTIFIC OBSERVATION of the *sanitary condition* of the community, and the *causes* influencing it. That such observations, or, in other words, *skilled sanitary inspections*, can be made only by persons of a medical education—that private physicians cannot make them extensively and continuedly enough for the purpose, and that they require specially appointed *health officers*, surely is too evident to every intelligent person to require much elucidation.

Let any one but *consider* (even if ever so superficially) what duties such inspection involves. It must embrace the whole manner—the *tout-ensemble*—of a man's life and his relation to all natural and artificial agencies affecting health. It must yield scientific STATISTICAL, CHEMICAL, MICROSCOPICAL and TECHNOLOGICAL results for sanitary purposes. It requires a health officer to prepare, and keep corrected, a SANITARY MAP, (of the district alloted to his inspection,) showing the grade, width and condition of the streets, the sewers, the soil; the vacant lots and buildings, and a SANITARY REGISTER, showing the number and condition of the inhabitants; not only the deaths, but also the diseases occurring in each locality, with meteorological, barometric and thermometric records, as well as occasional chemical and microscopical analyses of the air and dinking water of a particular locality, of particular

articles of food, etc. I do not mean to say that every *medical man* is fit for such inspection, but that none except a person of a *medical education* IS! A health officer, besides making the ordinary medical studies, must pay *particular attention* to the causation, eradication and prevention of disease. And here allow me for a moment to enter into an explanation of the *term* "disease." Although it is convenient in description and discussion to speak of disease as an entity, all educated physicians (if not, indeed, all educated persons,) are well aware that what is so designated, has really *no* personal or ontological character, but is only a condition, and may be defined "a *perversion* either of the functions or of the structure of the body, or of any of its parts." It is, in other words, "a deviation from the normal physiological state or action of the organism under the disturbing influences of morbid causes." In this respect, the positive progress of physical science enables us to stand to-day on altogether a different footing from that of our forefathers. "All pathology is but the physiology of organic perturbations."* The organism never becomes diseased by itself, nor does it ever alone become a cause of disease. Being the source of all manifestations of life, it is at the same time, also, the means of preservation of these manifestations; only that in its material constitution lies the general possibility of becoming diseased. But the realization of this possibility requires the addition of another factor, that may be called morbific—or literally, sick-making—Cause!

The morbific cause must, however, not be regarded a unit. In all cases there are really two different factors, only the co-action of which makes up a cause: producing disease as such—*i. e.*, that calls forth the phenomena giving rise to the term. But in many cases, the organism is forced, by original or acquired constitution, to act as second factor when one factor of a morbific cause has gone into operation. These factors are called, respectively, remote or predisposary, and direct or exciting cause. (One alone has also been called the cause, and the other the totality of circumstances under which it can act.)

Every man, even the healthiest, as we find him, has natural predispositions to disease; every one will, therefore, under favoring circumstances, become sick. Predispositions as well as morbific causes are very numerous and diverse. They are all of interest and importance to the practicing physician, but medical police is specially concerned with such of them only as transcend the ability of the individual to exclude. As to others than such, its province can only extend, according to circumstances, to calling attention, by appropriate instruction and warning, to the danger and the means of avoiding it; as to the former, however, it has the right and the duty to enforce regulations for their exclusion.

The branch of medicine specially concerned with the *annihilation of the causes of disease* has, during the last few years, found many

* Memoranda Medica, or Note-Book of Medical Principles. By Henry Hartshorne, A.M., M.D. Philadelphia, 1860.

ardent investigators! A *new name: Nosophthory*—literally, the science of eradicating disease—has been given to it, and it bids fair to attain the rank of honor among the medical sciences!

The SURVEY of this domain of Sanitary Police (i. e. *the exclusion of morbific causes*) may, for our present purpose, be divided into three sections, viz.: I. Total Extinction of Causes of Disease. II. Protective Measures against Contagious Diseases. III. Protective Measures against Miasmatic Diseases.

I. The total eradication of certain diseases may be considered under the two sub-heads: A. Prevention of hereditary diseases; B. Removal of injurious external influences.

A. Hereditary diseases communicated from progenitors to children, or, these going free, to children's children, "even to the third and fourth generation," are generally of such a nature that the healing art can do against them nothing, or but little. Medical police must look to the protection of a future member of the community from such serious complaints, the more as he is entirely innocent of their production, is not able in any way to anticipate, avoid, or get rid of them, and as they may, by burdening society with helpless sufferers from those scourges of the human race that ineffaceably stamp upon their victims deformity and disease, become highly prejudicial to the public weal. Among the means to meet this evil, we must first speak of restriction of such marriages as, in all human probability—for there is here no perfect certainty—will lead to the dire result.

The late Prof. Reese, in a Report on Infant Mortality to the American Medical Association, said:

"The *physical health* of both parties in every marriage contract should be regarded by each as equally important with the *moral* habits. And as marriage *is a civil contract*, the fruits of which vastly concern the public welfare (bearing, as they do, upon the present and future generation), it is the duty of the State, in every civilized and Christian country, to *surround* marriage with all the sanctions of *law*, and to *protect* the unborn *fruits* of such alliances from *premature destruction* by *statutory* enactments! These should be such as an enlightened science and philanthropy suggest, and should be encouraged and enforced by the united power of religion and law."

He then goes on to lay down: "No marriage should be permitted between parties until the physical health of both has been subjected to professional scrutiny. And such alliances should be *prohibited by law* to those of either sex who are the subjects of those diseases which are known to be hereditary or transmissible to offspring, or such as are fatal to infantile existence. Celibacy *should be required by statute* of all consumptive, scrofulous, scorbutic, gouty, insane, intemperate, and especially *syphilitic* individuals, of either sex; and this for grave reasons of State, which concern the public weal. Nor will any course, *short* of such legal prohibition of marriage, adequately correct the evil."*

* Transactions of the American Medical Association, Philada., 1857.

Now, this is strong and positive language, just such as the talented Professor was wont to use; but it admits, in my estimation, of grave doubts whether marriage can be wholly considered a civil contract which the State has under absolute control, and the unconditional right to prohibit. Is it not rather also to be regarded a domestic institution, which the State has only the conditional right to regulate? Prohibition may conflict with the most important, most sacred, private interests and rights! Nevertheless, I too contend that there *are* cases in which all these must yield to the supreme right of society. (But those who labor to establish among us a thorough sanitary police—and this place is as good as any to lay down the general principle which I wish every friend of sanitary reform would appreciate and act on—should not go too far in their proposals and demands, lest, indeed, as Vetter says, "embracing, on the one hand, many objects of ordinary police, penetrating, on the other, into the recesses of domestic life, choosing the bride for the husband, calling upon the able-bodied for procreation to marry, and forbidding marriage to the weaker, watching the arrangement and the affairs of the household, the bringing up of our children, and the very morsel that we swallow—medical police would become a greater plague and nuisance than any it could remove, and instead of promoting the health, would only interfere with the best interests of the community.")

Marriages not capable of carrying out their object, and positively injurious to the general good, society must prohibit. Marriages not in this category, yet involving possible injurious consequences to the offspring, may be endeavored to be restrained by suitable instruction and warning, leaving it optional to the parties, according to circumstances, to enter them or not. From this stand-point the possible prohibition of the following marriages seems indicated: (1.) Marriages before the age of sexual maturity, the precise age to be fixed by law. (2.) Marriages between persons affected with diseases that will *certainly*, or with *very great probability*, be communicated to their offspring, disabling them positively, or that interfere with their mental self-consciousness and responsibility. In this class of diseases insanity and the venereal may be included. (When entirely cured, which must, however, be positively ascertained, there can of course be no reason for prohibiting the marriage any longer.) (3.) Incestuous marriages, in regard to which laws should accurately define the *various degrees of relationship* within which marriage is prohibited.

The next source of hereditary diseases is "Illegitimate Procreation." This opens for discussion the extensive chapters of prostitution, destitution or pauperism, and obscenity or voluntary offenses against decency, in which one of the first questions that must be met is, whether prostitution should by the law be ignored, or sought out and punished, or licensed and regulated. My own conviction is decidedly against both the expediency and the morality of a State's *licensing* such vice; but I concur in the suggestion of my friend, Dr. Griscom, that all prostitutes should be subjected to

examination, to determine whether they are affected with venereal disease, and if found diseased, should be sent to the Island to be cured. The whole subject, however, requires grave weighing in all its relations.

B. In the "*removal of injurious external influences,*" Sanitary Police finds its most EXTENSIVE field.

Commencing with the "means for insuring undisturbed *fœtal* existence, laws and ordinances concerning pregnant women, abortion, etc., should be carefully made and stringently carried out. A *dissertation* on "the *sources* of abnormal conditions of the fœtus" formed the inaugural fruits of my medical studies; and I would refer here to my thesis presented for graduation to the Jefferson Medical College of Philadelphia, for a *résumé* of a subject that should be thoroughly investigated from the stand-point of the medical policist.

(2.) "Removal of injurious influences at the *birth* of children" comes next in order. In this connection I must add that *Lying-in Asylums* for expectant mothers, irrespective of character and civil condition (*i. e.* whether married or not), are urgently called for; but the beneficial working of *Regular Foundling Hospitals*, that have lately been so much advocated in our midst, is not so well established, and requires grave consideration.

(3.) The proper "Physical Education," as well as the "Mental," of children, especially of orphans and of poor children (who have no one else to see to it), should be carefully *superintended* by medical police.

(4.) Next we must take up the "subject of sound, wholesome, and unadulterated articles of FOOD and DRINK." For the detection of purity or the particular sophistication, some knowledge of, and manipulative dexterity in, analytical chemistry and microscopy on the part of the Health Warden, is imperatively demanded. Barely to enumerate the articles that he must examine chemically and microscopically, we may name—cereals and flour, bread, potatoes, vegetables, green and dried fruits, pickles and preserves, meats, sausages, fish, butter, cheese, sugar, confectionery, water for drinking and culinary purposes (including the important subject of aqueducts), milk, cream, coffee, tea, cocoa and chocolate, vinegar, soda-water, beer, ale and porter, wine, brandy, gin, and other alcoholic liquors, oils, salt, mustard, pepper, and other condiments, etc.

(5.) Protection against influences prejudicial to health, arising from the use of certain household utensils, colored paper, and copper and leaden vessels, etc. (It is of course understood that *absolute prohibition here*, except perhaps to some extent in public eating-houses and the like, is out of the question; still, much can be done to prevent their injurious consequences, by a proper Board of Health, and competent Health Wardens.)

(6.) Surveillance of various articles of manufacture, as toys, toilet articles, snuff, etc.

(7.) "Healthy domiciles, and surveillance of domiciliary arrangements." This is concerned with the condition of the *soil*, and

position of the particular lot on which the dwelling is erected, the architecture and the building materials, the arrangements for ventilation, sewerage and drainage, the water-closets and cesspools, the introduction and diffusion of heat, light, etc., etc., with *cleanliness in* the house and out of it as its first law. Even the bare enumeration of all the subdivisions under this head would extend this essay beyond its necessary limits. This care, while *most* urgently demanded for tenement houses, with their disease-producing cellar and closet residences of whole families, and crooked and narrow streets, is applicable in many respects to houses of all classes; for instance, as to injurious wall-papers, too early moving into new houses, etc.

(8.) Clean streets, docks, yards, and public places; removal of ashes, offal, garbage, etc.; removal of all nuisances. Public parks and promenades, public baths, public necessaries, hydrants, and water-closets.

(9.) The sanitary condition of public buildings, schools, churches, courts, prisons (including of course the food, clothing, and occupation of prisoners), and other public institutions.

(10.) Removal of injurious effects of various trades, manufactures, arts, and occupations. This refers both to the injurious effects on the health of the individuals engaged in any particular business, and to its noxious influence on the health of the community in which it is carried on. Here, too, a wide field is open for public hygiene and sanitary reform. Its cultivation discloses the REMOTE CAUSES of many diseases, and refers them to evils in our civil state, many of which might *easily* be removed. I pass on without specifying the various branches of human industry, and without alluding to military, navy, and merchant ship medical police, which all belong to this division. I must, however, say that several occupations generally supposed injurious, are really, or can be made, entirely harmless with proper hygienic regulations.

(11.) "Prevention of injurious emanations to the community from its burial-grounds." This necessitates regulations for the transportation, and place and manner of interment of the dead.

(12.) Precautions against the indiscriminate sale of poisons.

(13.) Precautions against dangerous animals, to prevent hydrophobia, etc.

Precautionary measures against suicide, drunkenness, and injuries inflicted by insane persons, etc.

Precautionary measures against injuries from falling down of objects, against falling into the water, or into pits, excavations in the street, against injuries at fires, etc., and prohibition of certain imprudent acts dangerous to public health or life; and

(14.) Precautionary measures against explosions, against dangers in public conveyances, on cars and steamboats, and on ice.

Having thus rapidly run over our first section of the Domain of Sanitary Police (which embraced the total *eradication* of certain causes of disease), we may cast a few glances towards the two remaining sections—namely, the institution of Protective Measures

against *contagious* and *miasmatic* diseases. We shall look at these very cursorily.

Endemic diseases depend for their production on LOCAL conditions, as geographical position, soil, climate, manner of life, drinking water, food, supply of air and light, etc.

Epidemics depend, generally, on particular conditions and foreign ingredients in the *atmosphere.*

Infectious diseases (including under this name, for the sake of convenience, *all communicable* abnormal conditions, therefore both contagious and miasmatic diseases) depend—(1.) On the communication to the organism of some material cause of a disease *(materies infectionis);* and (2.) On the *susceptibility* of the organism—*i. e.* on its capability of becoming affected thereby so that a disease *sui generis* is the product of the infection, or communication. Without the infection on the one hand, and the susceptibility on the other, there can be no infectious disease. The best means, therefore, for protecting mankind from all *existing infectious diseases* is that which *destroys* the *susceptibility* to become affected thereby, if that can be accomplished *without* injury to health. Now, while there are indications and reasonable grounds for the hope that the unceasing progress of the physical sciences will eventually—aye, perchance very soon (for even at this moment but a few links are wanting in the chain of evidence)—satisfactorily solve this problem, *we already do possess* that means in relation to one of the most *terrible* afflictions of humanity, SMALL-POX, which formerly attacked one-half of the whole *human race,* and almost regularly either *killed* or *for life disfigured* its victims. That the protective means at our command —vaccination—is *imperatively required* by society, seems superfluous to state; and that it is the duty of medical police to use *coercion, if need be,* to APPLY IT, is (after my remarks on compulsion in the beginning of this paper) self-evident.

On the question, How *should* and *can* compulsory vaccination be *accomplished?* I hope to have at a future time the privilege of addressing you.

As to *miasmatic diseases,* it is urged that QUININE, taken during exposure to malarial influences, possesses the power of preventing them.

The endemic *cholera infantum* undoubtedly has as its causation the three elements—intense summer HEAT, the *atmosphere* of large CITIES, and the peculiar susceptibility of *infants.* (Of these, the second is, of course, most under control, by removal to the pure air of the open country.)

Again, the mode of causation of *typhus fever* appears to be placed beyond a doubt! It seems to depend, *in the first place,* upon the one *essential* cause, *Ochlesis,* or CROWD-POISON! Yet *when* shall we hear *no more* of *Jail* fever, *camp* fever, *ship* fever, and by whatever other synonyms and "aliases" typhus ravages humanity! "Wherever the excreta of human beings from their lungs and skins, as well as bowels and kidneys, *accumulate* in an unrenewed atmosphere for a considerable period, TYPHUS WILL BE

produced. Then it becomes infectious: both miasmatic and contagious; *i. e.*, not only do certain *places* become tainted with it, so that all persons abiding there, are liable to it, but a *single patient* with typhus, taken to a *new neighborhood*, may generate disease in other *persons*. The excretory zymotic agent, which ordinarily requires *numerous* bodies to afford it in typhus-breeding quantity, is so *concentrated* and *dynamized* in the body of the patient, sick with the fever, as to have in it the poisoning power of a whole crowd! Thus, in typhus, the morbid poison is originated by the alteration and accumulation of matters *naturally produced in the body*. It is not so with the contagion of small-pox—the *origin* of which is not thus controllable by circumstances, in the absence of its specific cause, nor is it so with the *localized* infection of yellow fever, or the *migratory* poison-cause of cholera." What a field there is here for a proper medical police—what results can crown its labors—is obvious! A similar remark, almost, applies to endemic TYPHOID *fever*, although its causation is involved, as yet, in far greater obscurity. That it can be—and frequently is—produced by putrid exhalations of some kind, and in many instances by emanations arising from sewers, there can, however, be no doubt. It was of this disease that Prince Albert of England died!

The fertile and abused subject of *Quarantine* I must pass by. Good in its place, how bad is it out of place!

In the protection of localities, it is believed that the most desirable quarantine is a *dirt quarantine*. "Annihilate or exclude *dirt*, *i. e.*, putrefiable animal and vegetable detritus, and no *migratory* or *malignant* morbific poison can sustain its existence even if its cause be imported to the spot!" Thus it is maintained that, by sanitary reform, ALL MALIGNANT EPIDEMICS ARE PREVENTABLE; and it is interesting to know that this has been proved, even as regards plague, once the most destructive of all petstilences, and looked upon as the very *type* of *contagion!* It has now, so to speak, died out in those cities of the East to which it was formerly a *frequent visitant*, if not an endemic. Long ago it was finally excluded from all the parts of *Western Europe, not* by quarantine, but by improved *local* SANITARY ARRANGEMENTS! Its fountain-head, the great Oriental capital, *Cairo*, before the time of Mehemed Ali, many times lost tens of thousands of inhabitants by its visitations. From here it spread, devastating over Egypt and the world! The viceroy named, and his son, Ibrahim Pasha, (though unaware of the stupendously beneficial results of the undertaking), removed the hills between Boulâq and the mouth of the Nile, aud transformed an immense swamp in the heart of the city, and the *receptacle* of all its filth, into a park (or olive and fruit-bearing pleasure garden—the "Esbekiah"). Other local sanitary arrangements were enforced, and now CAIRO (*and with it, all humanity*) is FREE FROM PLAGUE!*

* See the subject of *Etiology*, Hartshorne's Memoranda Medica, Philadelphia, 1860.

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In conclusion, let me repeat five words, which we can never too often reiterate in the ears of the public and of our Legislature—five words of *Truth!* and *Hope!!* and *Charity!!!*

"*All malignant epidemics are preventable.*" "By attention to the laws of public and domestic hygiene, all malignant epidemics are preventable." This truth must become the gospel text of the Evangelists of Sanitary Reform! Promulgated through all the avenues to the public mind, every civilized community must appreciate its import, and would soon, by appropriate sanitary measures, realize some of its promises!

"All malignant epidemics are preventable," AND CAN BE PREVENTED by attention to the laws of hygiene, which it is the object of *this Association* to have systemized and acted upon in the Metropolitan Health District! SHALL *they ever be prevented among us?*

Well did the Sanitary Committee of our Board of Health for 1849, say: "To no other work should the authorities address themselves more earnestly than the establishment of a *thoroughly organized medical police.* * * * The *advantages* of such a measure would be *incalculable.*"

Well did the State Senate Select Committee, in 1859, say: "Preventive Medicine, rising rapidly to the perfection of a science, is capable of exerting a vast influence over the welfare, physical and moral, of the human race!"

Well did Dr. Griscom, *before this Association*, but a few months ago, quote Mr. Simon's words: "*Preventive Medicine* will effect INFINITELY MORE for mankind than all the DRUGS which have *yet been discovered*, and all the *curative skill* which has *ever* been exerted for the *alleviation* of disease."

Mr. President, and Members of the New York Sanitary Association: Fellow-Citizens of our beloved Empire City: Let us hope that the happy hour is near at hand when the Metropolis of the New World can partake of the fruits of a Medical Police.—*Amer. Med. Monthly.*

Clinical Remarks on three cases of Malingering, namely, two cases of Pretended Blood-spitting or Vomiting, and one of Suppression of Urine. By Dr. JOHNSON.

In a recent clinical lecture, Dr. Johnson referred to some cases of feigned disease as follows:—

In the course of our professional experience we sometimes have to deal with persons who, from various motives, attempt to impose upon us by feigning diseases or the symptoms of diseases, which either have no real existence or which are voluntarily excited by the would-be patient. Medical officers in the army and navy find it necessary to be very watchful to avoid being deceived by malin-

gering men; in civil practice these attempts at imposition are much more commonly made by women and especially by hysterical girls, whose especial delight it is to excite sympathy for themselves and to mystify the doctor. I purpose now to say a few words respecting three cases of this kind which have recently come under my observation; two of the cases occurred in the hospital, and one in my private practice.

Case 1. The first case was that of a girl, E. S., who made a very poor attempt to feign vomiting of blood. She was 16 years of age, had a fresh color, and a plump and healthy appearance. She stated that during the last four years she had been subject to fits, which, from her description, were evidently of an hysterical character. The catamenia had for some time past occurred at irregular intervals of from fourteen days to six weeks, and had sometimes continued for a week. She said that a fortnight before her admission, on October 17, she began to vomit blood, and that she had daily since that time vomited about half a pint of blood; the vomiting being accompanied with a feeling of swelling in the throat.

There were no symptoms of dyspepsia, no cough, nor any signs of disease within the chest. I have already said that her appearance was that of good health. The day after her admission she had a well-marked fit of hysteria of half an hour's duration, during which she continually muttered, "He's going to shoot me."

She stated that during the past year her fits had been more frequent since she received a fright from the sudden appearance of a man in the garden at night. The day after her admission, and the four succeeding days, she pretended to have vomited blood, and she produced a liquid of a pale pink color, which the most careless observer could scarcely mistake for blood. It did not coagulate with heat, and under the microscope we saw, not blood corpuscles, but globules of oil, probably from milk.

The house-physician took from her locker a small bottle containing a red liquid, apparently compound tincture of lavender. The pink liquid which our patient pretended to have vomited was evidently a mixture of milk with this compound tincture of lavender.

From this time there was no return of the pretended vomiting of blood, and after keeping her in the hospital for a few days in order to give her the benefit of a daily shower-bath, we sent her out.

Case 2. Elizabeth G., aged 19, a servant, was sent up to the hospital from the country by a lady in whose service she had been for two months previously. Her mistress had taken great interest in her, and sent us an elaborate history of her symptoms. She came in on February 4. It was then stated that the catamenia had been absent or extremely scanty for the past ten months. She had been subject to frequent fits of fainting; she had had a cough for a month; and for a fortnight this had been attended with daily spitting of blood to a variable amount; the largest quantity brought up in the twenty-four hours, according to the statement of her mistress, being about a pint and a half.

Notwithstanding this loss of blood, she had a healthy appearance

and a florid face. The voice during the first few days after admission was whispering, and she had an occasional loud barking cough. There were no physical signs of disease within the chest. She spat daily about two ounces of blood, which was usually of a bright color, always liquid, and apparently mixed with saliva; but it was never frothy, and never contained any material like mucus from the lungs.

It was evident that we had to deal with a case of hysteria, and from the first, suspecting some trick in connection with the hæmoptysis, I desired the attendants to keep a particular watch upon this symptom. I learned from the lady-sister in the ward that the blood was always spat out without cough or effort of any kind, as if it came from the back of the mouth or nostrils. I looked into her mouth several times before I discovered the source of the bleeding. At length, however, the mystery was explained. A few days since, at the time of my visit, the sun was shining brightly into the ward while I was examining her mouth with the aid of a bright metallic tongue depressor, which reflected a strong light upwards, and there, in the mucous membrane of the hard palate, I saw about twenty fine cuts or scratches, some of which were nearly healed, while others had evidently been made but a very short time before. When taxed with having deliberately attempted to deceive us, her face confessed though her tongue denied her guilt. She declared that she had not cut or pricked her mouth, and it was not until after she left the hospital that she confessed, as I learn, that she had scratched her mouth with a long darning-needle. After we had discovered her trick she did not venture to repeat the operation. Within three days nearly all traces of the cuts and scratches had disappeared; and the bleeding, which had been going on daily for a considerable time, entirely ceased. In the meantime we had been treating her with shower-baths and steel. She had recovered her voice. The spasmodic cough was rarely heard; and now, having put a stop to the hæmoptysis, we dismissed her.

Amongst other statements, to which we paid little heed, she declared that she had occasionally gone a week without an evacuation of the bowels, and two days without passing urine.

A pretended suppression of urine is not an uncommon phenomenon in cases of hysteria. I have lately met with an example in private practice, of which I will give you a few particulars.

Case 3. On March 7, I was asked by my friend, Dr. G., to see with him an unmarried lady, 21 years of age, of whom he gave the following history: She had been troubled with round worms; and after trying a variety of vermifuge medicines with only partial success, he gave her nine days ago half an ounce of oil of turpentine. The oil acted freely on the bowels, and brought away several worms. Two days afterwards he was sent for in consequence of no urine, or scarcely any, having been passed since the turpentine was given; and up to that time, that is, for a period of nine days, it was alleged that she had passed only about an ounce of urine a day. During this period she had remained in bed, eating and drinking as usual,

apparently in good health; there had been no vomiting, nor any pains either in the urinary organs or elsewhere. Dr. G. had twice introduced the catheter, and had drawn off each time only about half an ounce of urine. These specimens he brought to me. One was turbid with urates, the other was clear; neither specimen contained a trace of blood or albumen, or any other morbid constituent.

I have never yet met with an instance of suppression of urine after a dose of turpentine, in which there has not been more or less of stranguary, nor one in which the urine, when any could be obtained, was not found to be both bloody and albuminous. I saw the patient the same day; she had a peculiar, shy, nervous manner, such as we should expect to find in one who was conscious of an attempt to deceive her friends, and there was an entire absence of the symptoms which must have been present if, as she would have had us believe, the uterine had been almost entirely suppressed for nine days. As I have already stated, there was no irritation of kidneys or bladder, no vomiting, and nothing abnormal in the urine which was obtained by the catheter. I had no hesitation in expressing to the patient's mother my conviction that her daughter was practising an imposition, and that in spite of the careful watch which was said to have been kept over her, she had contrived to dispose of the water after passing it. I advised that she should be more closely watched, and that the catheter should not be again used unless the bladder became paralyzed by overdistension. I have heard from Dr. G. that three days after our visit he was sent for, when he found the bladder distended, and drew off a full quart of healthy urine by the catheter. It was al leged that only about an ounce had been passed during the previous three days. Yet no bad symptoms had occurred. Dr. G. now insisted upon her getting up as usual, and said he should not again interfere without some urgent need. After another interval of three days he was again sent for. The bladder was again distended; curiously enough, however, only about half a pint came away through the catheter, but a few minutes afterwards she passed voluntarily at least a quart of urine.

Here the history of the case ends. Dr. G. writes to me that he sees his patient walking about every day, that she "cuts" him "because he has said unkind things to her relatives;' but she sends for her steel medicine, and her mother reports that she takes it.

If you should ever be troubled with a case like this, in which there is what you suspect to be only a pretended suppression of urine, you may, with the aid of a sensible and trustworthy nurse, quickly bring the symptoms to a decisive test. Let the nurse be instructed to ply the patient liberally with any simple liquid, frequent cups of tea, or toast and water, or barley-water, and if you please you may add to the diuretic tendency of the liquid by an occasional dose of compound spirit of juniper, or the spirit of nitric ether, or both combined. The nurse is to be instructed on no account to leave the patient even for a moment. If at the end of twelve hours, no urine having been passed in the interval, the blad-

der is not distended, you may conclude that your suspicions have not been well founded, and that there is some defect in the secreting power of the kidney.—*Med. Times and Gaz.*, April 26, 1862.

Fermentation as a Cause of Disease. By M. POLLI, of Milan.

The chemists, who have lately studied with the greatest success the phenomena of fermentation, have observed that this process has an importance much greater than could have been imagined. In fact, it is by fermentation that we explain the spontaneous decompositions of vegetable and animal tissues, such as dry putrefaction, eremacausis, gangrene, etc., and the whole series of successive transformations which organic substances undergo until they are converted into water, carbonic acid, ammonia, and inorganic substances. In consequence of fermentation, fatty bodies furnish us glycerine, salicine, and glucose; myronate of potassa is converted into the essential oil of mustard; neutral substances, such as urea and allantoin, evolve ammonia; and amygdalin produces the poisonous substances, essential oil of bitter almonds, and prussic acid.

Ferments act either by contact or *catalysis*. They are sometimes living beings, and sometimes very active substances, which are not even organized. Diastase, emulsin, pepsin, play the part of ferments. They can split up *(dédoubler)*, hydrate, or render isomeric organic substances.

There is a great analogy between the processes of fermentation and some of the organic metamorphoses which preside over certain maladies. Given an albuminoid substance, which in a particular stage of change, will act as a ferment, and particular substances, which are the results of such action, and here is the foundation of the humoral theory explained by well-studied chemical facts.*

But analogy is not sufficient; it has been demonstrated by experiments thoroughly made, that the blood experiences, in certain diseases, alterations and variations in its composition, and that we may produce an artificial disease which will present a wonderful resemblance to natural diseases, by injecting into the blood-vessels substances capable of acting as ferments. The numerous abscesses produced by the injection of pus into the veins of dogs; the septic affections caused by the injection of putrid purulent substances into the veins of animals; the diseases, presenting all the characteristics of typhoid fever which can be provoked, by the injection of putrefied blood into the circulation; in fine, contagious diseases, such as glanders, which are produced by the admission of an infecting sub-

* According to Pasteur, the ferment is not an albuminous substance altered by oxygen, but an organized being, whose germ exists in the air. The presence of albuminous matters is an indispensable condition of all fermentation, because the ferment needs such substances for its development.

stance;—these are facts which prove that one can produce a constitutional affection by the simple introduction into the blood of a substance capable of playing the part of a ferment. There are some diseases proceeding from a morbific ferment which might be styled *catalytic* diseases, in which the morbific matter, producing metamorphoses from contact with the alterable principles of the blood, is the first cause of all the symptoms which the animal economy presents. Finally, it is not possible to deny that fermentation may be produced in the blood.

But admitting as an initial point, in many diseases, the action of a specific ferment in the blood, is it possible to prevent its effects, to render it inactive in the living body, as we can by means of many chemical agents outside of the organism? This is the principal point which gives interest to this pathological question.

M. Polli thinks that he has shown, by a series of facts and conclusive experiments, that it is possible to neutralize morbific ferments in the blood of animals by chemical substances, which will not alter the blood so much as to be incompatible with life, and that it is through the employment of such substances that one may hope to treat successfully all diseases whose primary cause is fermentation.

We know that sulphurous acid gas prevents alcoholic and acetic fermentations, and that it is also an obstacle to the fermentation of animal substances, and of all organic substances in general. Thus it arrests, even after the commencement of the process, the fermentation which the saliva and diastase produce when brought into contact with starch, that which myronin determines in the paste of black mustard, that which emulsin produces in the amygdalin of bitter almonds, etc.

M. Polli has discovered that the alkaline and earthy sulphites enjoy the same antiseptic and decolorizing properties. This fact is very important, since it allows of the employment of sulphurous acid in therapeutics. He believes that he has also discovered that the action of sulphurous acid and the sulphites on coloring matters, as well as on ferments, is not a deoxygenating process, nor a combination, nor a destructive process, but simply a molecular modification.

This *modus operandi* of sulphurous acid and the sulphites would give a suitable explanation of the precious property possessed by these chemical preparations, of preventing or energetically arresting the action of morbific ferments artificially introduced into the blood of animals, without altering the composition of the latter in such a manner as to be incompatible with life.

Polli, after a large number of experiments on dogs, has determined the dose of the sulphites which can be internally administered, the metamorphoses these undergo in the organism, and their curative action in affections produced by the injection of putrid or contagious matters into the blood.

1. Ten grammes of sulphite of soda were given to a dog during five days; then a drachm of pus was injected into the femoral vein.

The animal appeared sad, and refused the food which was offered it, but on the next day it regained its liveliness and ate voluntarily. Two days afterwards the same experiment was commenced, with the same results. At the end of some days the animal was perfectly cured.

2. On two occasions a gramme of pus was injected into the veins of another dog more robust than the preceding. The animal was sad; the next day it took food; the day following it was dejected, the respiration difficult, the wounds were sanious, the left leg and foot became swollen, and it died ten days afterwards.

3. An equal quantity of putrid blood was injected into the veins of three dogs; one died five hours after the injection, another after five days of sickness, and the third, who had taken sulphite of soda, experienced no uneasiness, and was cured rapidly.

4. A large number of other experiments, made with putrid blood and the mucus of glanders, showed that the animals died with all the symptoms of general infection whenever they were not treated with sulphite of soda, and that they were saved whenever they were put under the influence of this medicament.

If these facts should be confirmed by other experiments, M. Polli will have rendered an immense service to therapeutics, and will have cast some light on the cause—as yet so obscure—of a large number of diseases.—*(Jour. de Phar. et de Chim.)* L. H. S.

New York Academy of Medicine—Tracheotomy in Croup.

Dr. A. L. Voss opened the discussion on the subject of tracheotomy in croup, remarking as follows:—In opening for discussion the subject of Tracheotomy in Croup, I have to state that, having published more than two years ago a paper entitled "A Historical and Critical Examination of the Operation of Tracheotomy in Croup, with a Report of fourteen cases" (*New York Journal of Medicine*, January, 1860, pages 30–59), I shall refer to the paper repeatedly. Dr. Francis Home of Edinburgh, published the first monograph on croup in 1765; his book contains, on the subject of the operation in question, the following words (page 59): "When the case is desperate, may we not try bronchotomy? I can see no weighty objection to that operation, as the membrane can be so easily got at, and is very loose. Many a more hazardous operation is daily performed. I would propose, however, that it should be first tried on a dead subject, that we may proceed with all manner of caution and assistance. But something ought to be tried in this dangerous situation." You see how early the operation, as a last resort, presented itself to the plain and simple reasoning mind. The earliest, although unsuccessfully performed operation of tracheotomy in croup, I am able to find, is by Duntze of Bremen, about 1790; the first case successfully operated upon is that by Thomas

Chevallier of London, in 1814. But the more general introduction of the operation we owe to the labors of Bretonneau (his first success in 1825), and to his pupils and followers, Trousseau, Velpeau, and Guersant. I believe now that there are very few who object to the performance of the operation in croup in general, and the Academy of Medicine in Paris declared in the celebrated discussion upon this subject, and the "*Tabage*" in 1859, that tracheotomy is, in the actual state of science, the only remedy to resort to, if there is no more chance of relief by medicinal substances. From France the operation came in general use in Germany, then in England, and lastly here.

As causes for the want of success in the earlier cases of tracheotomy, we have to point out, first, the treatment before the operation, antiphlogistics, or at least weakening remedies, such as blisters, etc., used very freely; second, the operation, if resorted to, was performed at the very last moment; third, the manner of operation, the instruments, and the after-treatment, were alike defective. At present, these causes of failure being for the most part removed, the success in consequence is much greater.

Guersant operated twenty-three times before he could boast of a successful case, and he had but seventeen successful cases out of eighty-two operations. I have thought it would be interesting to make the following statement in reference to the number of operations performed by different French surgeons, and their results, as I have been able to gather them from the French literature upon the subject.

	No. of operations.	No. saved.		No. of operations.	No. saved.
Trousseau 1850–55 (private practice)	42	22	Favre	6	—
Gerdy	6	4	Auzias	2	1
Archambault	12	7	Robert	23	1
Gosselin	23	—	Nelaton	36	3
Brochin	3	—	Jobert de Lamballe	60	10
Follin	15	2	Lenoir	20	1
Brora	10	6	Desormeaux	11	2
Depaul	7	1	Monod	40	—
Richard	12	2	Thielry	37	3
Guerin	12	1	Roser (Marburg)	42	19
Michon	20	2	Passavant (Frankfort)	9	5
Deljuise	12	—	Fock (Magdeburg)	24	10
Langier	8	1	Baum (Gottingen)	31	12
Huguier	8	—	Peinemann (Gottingen)	8	5
Velpeau	13	4			
Jarjavay	12	—			

Of 131 operations performed by eight French physicians proper, 49 were successful; of 443 cases operated on in the Hôpital des Enfans trouvés from 1850 to July, 1858, a period of eight and a half years, 100 were successful.

In regard to the number of operations performed in this city I have not at present the means of giving any reliable statistics. It is worthy of remark that I have not yet heard of a successful operation in New York during the year 1859 (famous for diphtheria).

All these statistical data are, however, worth but little when we consider the great want of detial in the description of the symptoms of the malady. Real croup, I fear, is a disease of unfrequent occurrence, but much more fatal than usually believed. It is a specific disease (of zymotic character), sometimes local only, sometimes accompanied with general disturbance, sometimes sporadic, sometimes epidemic, and even contagious, wholly distinct from inflammation or catarrh.

The anatomical alteration pathnogomic of croup is the false membrane, lining and blocking up a more or less considerable portion of the air-passages, which gives rise in turn to dyspnœa, asphyxia, and sopor. Now, when insufficient respiration is present with commencing asphyxia, and is not dependent on affections of the lungs, and is not relieved by emetics, or perhaps other medicines, I think the operation of tracheotomy should be performed without hesitation. Tracheotomy is indicated where stenosis of the larynx or trachea exists. There we ought to resort to tracheotomy, in order to give free access of air to the lungs. If these organs are sound, the operation is *cæterris paribus* imminently a life-saving operation. If the lungs or the general system are otherwise affected, we, by freeing the patient from the imminent danger of suffocation gain time to treat the accompanying affections by the proper means. I will not speak of the danger of the operation as an additional complication to the already affected organ, as this subject is differently judged of by different authors. Tracheotomy stands, in this respect, on a level with other life-saving operations, herniotomy, ligature, cæsarean section, etc., and the same reasons sustaining such operations will be also applicable to tracheotomy. It ought to be remembered, that unrelieved stenosis of the larynx is absolutely fatal, even uncomplicated by other affections. As general diphtheritic intoxication or bronchitis, or bronchial croup, or pneumonia, or emphysema, are not affections absolutely fatal like stenosis of the larynx, in case the latter affection should be complicated with one of the former, the removal of the stenosis even by an operation would not only be justified but required, and it is obvious that the happy termination of the operation in complicated cases, or in very young children, is by far less frequent than in cases of no complication or in older children.

The younger the child is the less likely is a happy termination of the case after the operation to be presumed. In a "Lettre des Internes à Thôpital des Enfans à M. Bouvier," they recommend not to operate on children under two years of age, and on those from two to two and a half only with reluctance. The reports of cases of successful tracheotomy in children under two years are scarce, it is true, but Trousseau saved by the operation a child of thirteen months, still nursing. Scoutetten's famous case shows, at least, that a child of six weeks *may* be operated on with success if such an unusual event should ever present itself again. (It was Scoutetten's first operation, relating to his own child, but it is more than doubtful if the affection of the child was croup or rather

laryngismus.) The youngest child I operated on was twenty months, the youngest saved was one two years four months; I also saved one two years six months, both girls.—*Amer. Med. Times.*

The Conservative Treatment of Fractures. By ISIDOR GLÜCK, M.D., Chief Surgeon to the Hungarian Hussars.

Gypsum or Stucco Bandages.—Although even in compound fractures, where the wounded place has to be left uncovered, the application of Seutin's starch bandage answers this purpose best, still there are some objections to its being used in the field, or even in the hospital.

1. *It dries too slowly*, and cannot replace therefore *immediately* manual extension, which is required in order to retain the ends of the broken bone in mutual contact. It is, therefore, necessary to use machines or apparatus till the bandage becomes dry, for 24 to 48 hours.

2. The *thickness* of the walls of the bandage *diminishes*, while the bandage becomes dry, and thus receding somewhat from the limb, cannot serve instead of the *manual extension.*

3. The application of the starch bandage costs on the field much time and trouble. The limb must first of all be surrounded by a roller, then covered with compresses and rollers, pasteboard and splints are then applied, and the whole again surrounded by a roller. The application of openings (windows) in Seutin's bandage is combined with difficulties. If the windows are made at the time when the bandage is applied, the same keeps *badly* together the fractured ends, and wood or tin splints must be used; if the windows have to be made when the bandage is *dry*, the wounded portion remains covered for a day or longer, and the excision or formation of the openings is in the hardened starch bandage yet more troublesome.

4. However dexterously we may apply the bandage, it will be pretty difficult to make so large openings as required in order to expose the injured portion without loosening at the same time the *whole bandage*, while small openings or windows expose but a portion of the injured part.

5. In suppurating wounds, the pus discharged, as well as the fluid applied for cleansing the wound, and the moisture of the cataplasms, will run under the bandage and destroy the epidermis.

6. The hardening and unequally contracting starch bandage (*i.e.* quickly hardening at its thin portions, and slower in its thicker ones) exerts an unequal pressure, and therefore an injurious effect, on the *swollen parts.*

7. The starch bandage cannot be applied for transporting the wounded soldier who receives on the battle-field a compound fracture, because it requires warm water (not always ready in the field)

for preparing it; then again, it dries slowly, the formation of windows causes loss of time and trouble, requiring the application of splints, and because the parts, being covered for a day or two, are injured, as suppuration may follow, and the pus stagnates and runs into the bandage; in damp weather it becomes *moist* and *soft*, in the rain; it is, therefore, necessary to have ready-made *capsules* of starch bandage, and the so-called *movo-amovible* bandage, which often do not appose sufficiently, and cannot therefore replace manual extension.

Recently, gypsum bandages have been suggested in Belgium, but their application, according to Dr. Mathieson and Van De Loo, is troublesome, and takes much time, so precious on the battle-field. This bandage is not lasting, its preparation and preservation still more difficult than that of Seutin's starch bandage. Much more preferable and practical is the preparation and application of *gypsum bandages* as made by Pirogoff,* and used by him to the greatest extent with the best results. The gypsum bandage is *on the battle-field* in many respects preferable to the starch bandage. The gypsum solution requires but *cold* water, and turns *hard* as soon as applied, and replaces therefore *immediately* manual extension, and neither machines nor apparatus are required for that purpose. The dry gypsum bandage becomes so hard that *no* splints are required, even if large windows are made, and transporting of the wounded soldier is *immediately* after the application of the bandage possible without injury.

The gypsum bandage is *simple* and *cheap*, as it consists of old *coarse linen* and *gypsum;* its application is simple and quickly made. The gypsum bandage replaces manual extension *perfectly*, the assistants need only for a *few minutes* keep the limb extended after the bandage has been applied, then the gypsum bandage is *stiff* and *hard* enough to retain the ends of the broken bone in the position given to them. Their displacement is *impossible* as long as the swelling does not diminish, and a *considerable* interspace is not formed between the limb and the bandage. Thus the gypsum bandage renders superfluous all machines for extension, as required, while the *starch bandage* becomes *dry*. Only by the application of the gypsum bandage in *oblique* fractures of the *thigh* it is necessary to fix the pelvis, and to retain the limb extended by means of a *bedtable*, and by weights attached to the extremity. More apparent yet are the advantages of the gypsum bandage in oblique fractures where the ends of the broken bone are *distant* from each other, in compound fractures, and generally everywhere where it is necessary to keep open a wounded spot. In Pirogoff's mode of applying the gypsum bandage, the openings (windows) may be made *at once;* through them it is possible to view the position of the broken ends, the excoriations and wounds, and the curative process may be watched in its course. The gypsum bandage does not contract like the starch bandage, interspaces form *slower* be-

* Professor of Surgery in St. Petersburg (Russia).

tween it and the leg, as in the gypsum bandage the interspaces depend upon the *decrease* only of the swelling, and not, like in starch bandages, also from unequal hardening of the bandage; and then, again, it does not become moist and soft in rainy weather. In complicated fractures the pus may be discharged, and find exit through the large windows made, and does not burrow itself *under* the bandage, as is common in the *starch* one. Wet dressings may be applied *immediately* on the wound itself. The gypsum bandage becomes hard immediately after having been applied; wounded soldiers may therefore be safely transported *immediately* after the application of the gypsum bandage, from one place to another, even in the rain, without the bandage being disturbed, although the gypsum bandage may appear *wet* externally, which sometimes lasts for a few hours. The gypsum bandage may, therefore, be cut through immediately after the application in the interspace of the splints, if that should be required, in consequence of too great a pressure, or pains, etc.

On the battle-field as well as in the hospitals, for transportation of the wounded soldier, in the treatment of complicated fractures with great dislocation of the ends of the fractured bones, the gypsum bandage is preferable to *every other* kind of bandages.

Requisites necessary for the Application of Gypsum Bandages in the Battle-field as well as in the Hospitals—1. Long, old hospital stockings made of linen, cut in front along the seam (if the seam is behind the stocking it must be turned and cut); old drawers also cut along the seam, and divided for one or the other limb; sleeves of old shirts (or instead of those long linen flaps cut in the form of stockings, drawers or sleeves); jackets or old vests, abdominal bandages covering the body once and a half; for fractures of the bones of the rump, pelvis, and of the neck of the thigh and bone. These pieces of linen used for surrounding the limb must be *equal*, *soft*, and *dense*. All seams must be removed.

2. *Cotton* or cleaned soft *flax*, *pads* filled with soft material, lint or flax for filling up (for instance, around the trochanters, around the malleoli in the popliteal region, and around the achilles tendons), simple and graduated compresses.

3. *Splints* of different dimensions in regard to length, width, and thickness, made of old course *sack linen*, as used for instance in hospitals for mattresses or straw mattresses. The old sack linen is folded twice, thrice, or four times, to the width of two fingers to one-third of a yard. The splints must, in fractures of the leg, the upper and forearm, exceed at least one-third of a yard the fractured bone, and in fractures of the *thigh*, and that of the neck of the thigh, it must be one-third of a yard longer than the *whole* extremity.

4. Strips (compresses) of the same linen from .2 inches wide, and of such a length as to surround the limb once or twice, they are calculated to fasten the splints, and are called *transversal* stripes (Pirogoff). These transversal stripes may be made also of fine linen, if the bandage should be a light one.

5. Plaster of Paris (gypsum) in form of fine powder and well dried. For the application of a bandage, never less than 2 lbs. have to be used (as for fracture of the forearm), nor more than 7 lbs., as for fracture of the neck of the thigh bone.

6. A vessel with cold water. The gypsum solution should not harden sooner than in five or eight minutes, in order to allow the application of the bandage. Although hardened, it still looks wet from the evaporation of the water, out of the bandage painted over with gypsum solution, and the patient may safely be carried with it.

7. *Large brushes*, as used by house painters. Besides those necessary requisites in hospitals, may be used finer linen rollers for simple fractures and splints made out of pasteboard; and for complicated fractures, with large wounds, *splints* of wood, of different dimensions, together with pads attached to them on both ends, and also a few pieces of sheet iron or tin may be held ready.

The Application of Gypsum Bandages—Is made in the following way: The injured limb is first surrounded with dry linen, a sleeve, a linen stocking, or with half a drawer. Bony prominences must be wadded, and hollows filled out with cotton. The linen surrounding it must not be too thin, nor have holes in it, in which case the linen must be doubled, or the limb first covered by cotton. If this is not done the moisture presses to the skin, and the patient complains of a cold or burning sensation.

2. The broken limb is put in the required position, the extension is then made, and the fractured ends then approximated. Sometimes it is necessary to begin with the reduction, and subsequently follows the surrounding of the limb.

3. The splints and the traverse strips of sack linen, each three or four times folded, are put near the patient *in that* order as required to be later applied to the limb. An assistant prepares the solution of gypsum, and paints with it the splints and strips, or rather dips them into the solution and brushes them with it. The proper application of the bandage depends now upon the gypsum solution. If the solution be too *thick* and dries *quick*, the splints and transverse strips are not *united* firmly together, nor are the splints firmly fixed if the solution be too thin. When the solution becomes denser, water must not be added to it, as the solution becomes through it creamy, is not imbibed by the linen, cannot be smoothed, does not adhere, and takes a long time to become dry.

5. The splints and strips of linen must be dipped in the solution, which I now prepare by adding to two pounds of water the equal weight of gypsum. They must be extended and swinging free, and must thus be brushed over on both sides with the gypsum solution as you see it here.

6. The splints must be applied longitudinally to the limb, and must be fixed by the transverse strips, carried around both the limb and splint. The transverse strips are applied in pairs, so that the one should cover the other partially. The splints may be applied

in such a manner that the one should cover the other partially, or, what is preferable, in such a way that between the splints should remain a free open space on *the side*, in *front of*, or *behind* the limb. The assistants producing extension must continue to do so until the bandage is *hardened*, i. e., about eight minutes after the gypsum bandage has been applied. During its application the limb must be kept extended free, in order to be accessible from all sides. The splints must be pressed firmly to the limb by the hand. The *transverse* strips must be drawn firmly and tightened around the limb, and by the hand or brush well covered with gypsum solution, in order that all prominences and hollows should be equalized. In oblique fractures and dislocations of the fractured ends, at least two layers of transverse strips are necessary. But if the bandage has yet to be removed, it is necessary—

1st. To apply the splints with a space between them.

2d. The transverse strips are covered from the middle (where about the extent of two inches remains uncovered) towards their ends with gypsum solution.

3d. The transverse strips are applied so that the uncovered part should correspond in its situation to the longitudinal interspace between the splints.

In the field it is necessary to have arranged, before the application of a bandage, all requisites in one package for each fracture separate. Thus, for fracture of the forearm, the bandages should be separate from those for fracture of the leg, as you see it here.—*American Medical Monthly.*

The Italian Campaign of 1859. *Medico-Chirurgical Letters from General Head-Quarters.* By Dr. A. BERTHERAND, Principal Medical Officer of the First Class, etc., etc. Translated for the American Medical Monthly.

LETTER III.

Milan — The Greater Hospital — Temporary Branches — The Institute of Brera — The Route from Milan to Brescia — The Goitre in Lombardy — Sanitary Condition of the Army.

To PROFESSOR ROUCHER:

My Dear Friend—My letter of the 8th to our worthy colleague, Dr. Frison, closed amid the shouts of the enthusiastic welcome given us by the people of Milan. To add to the numerous accounts which have already reached you of this fairy-like reception, would be superfluous. Allow me, then, continuing my *rôle* of observer and physician, to lead you from the Corsi and the crowd which overflows them, to the more remote quarters of the city, where

Lombard gratitude and charity have generously thrown open asylums to the victims of the field of honor. More than six thousand wounded French and Austrians are already found gathered in the great city, and soon the glorious but bloody encounter of Melegnano will carry the figure up to eight thousand. The most admirably ordered administration might certainly stand appalled! But no emergency can be too great for the sentiments of patriotism and devotion which exalt every Milanese heart. To the large hospitals and infirmaries of Maggiore, San Ambrogio, Fate Bene Fratelli, and Fate Bene Sorelli, have been added, as if by magic, the temporary branches of San Lucca, Monastero Maggiore, Collegio San Filippo, etc. Benevolent commissions are organized among the more noted citizens; the most generous donations of bedding, linen and lint, pour in from every side. Physicians, superintendents, even laborers, all are at their post. In order to infuse as much order as possible into this immense service, all the Austrians, whether sick or wounded, are collected in the spacious halls of the San Francesco barracks. The generosity of the Emperor has liberated forty of their captured surgeons, on the sole condition that they shall continue their useful ministrations at that place. San Ambrogio, the ordinary military hospital of Milan, will be especially devoted to the necessities of the Sardinian army, while to the French are assigned the other hospitals which we have named, and those which it is still designed to open. Nor is this all.

To assure to each unfortunate those delicate attentions which, in the hospitals of our own land, devolve upon the pious labor of the Sisters of St. Vincent de Paul, would necessitate the depopulation of all the convents in Lombardy, and even this holy *impressment* of the daughters of Heaven would not suffice for the emergency. But be reassured; the same public spirit which yesterday enrolled father and son under the banners of Garibaldi, impelling every arm as well as every heart to the conquest of national independence, will to-day recruit among mothers and beloved daughters, these auxiliary legions of religious devotion. Our wounded will soon tell you themselves of their hourly attentions, the constancy with which they dressed their wounds, proof against the heart-rending scenes of the hospital, and of those nameless alleviations, the potent secret of which woman's heart never so nobly divulged!

God forbid that among so many instances of assiduous care, of generous self-devotion, of kindnesses lavished without preference as they were without ostentation, I should be willing to establish degrees, to concentrate on certain of the guardian angels of our soldiers' couches of pain, the respect and admiration in which the gratitude of our army blends them all without distinction. And yet, how can I impose silence upon the memories of our visit to San Filippo, on the 10th of June? There, as everywhere, charity watched, ever alert, earnest, indefatigable. In one of the lower wards, occupied by those who were more severely wounded, two women that morning come from Melegnano, mother and daughter, both young and beautiful; the Marquess L. and the Comtess M.

were bestowing their impromptu ministrations with a grace at once touching and sad. The severe mourning robes of the Marquess served to deepen the tinge of melancholy which marked her demeanor. It was evident that the echo of a cruel loss had inspired the heart of this noble mother with the heroism needful for the sad pilgrimage which she was to-day making, courageous, but heart-broken. Do but hear the Christian and sublime simplicity of her faith! "War, sir, snatched from me my eldest son: he died eight months since, from the effects of a ball received while fighting with your army at Sebastopol. When I learned that wounded Frenchmen had arrived at Milan, and that I could dress their wounds, I felt that God had sent me his first consolation."

The Greater Hospital, or Grand Civil Hospital, founded towards the middle of the fifteenth century, by the generous provisions of F. Sforza and Blanche Marie Visconte, his wife, commends itself by the spaciousness of its porticos and courts. Several of its wards recall the appearance and height of the naves of our churches. Having its rear on the Naviglio, its proximity to this canal affords inexhaustible supplies of water for the wants of its large population (from 2,500 to 3,000 patients), and insures the maintenance of a degree of cleanliness beyond anything that could be hoped for.

At the Greater Hospital, I had an opportunity of seeing—unfortunately the interview was a very brief one—the glorious wreck of the First Regiment of Zouaves, which left Algiers, so full, so brilliant, a few days before my own departure, and of which Melegno had just put *hors du combat* the colonel, thirty-three officers, and five hundred of its bravest soldiers! I regret, too, that lack of time prevented my meeting our worthy Milanese *confrères*, M. Gherini, the renowned operator, M. Cotta, those skillful physicians Griffini and Strambio, so honorably known from their connection with the medical press of Lombardy, and that phalanx of enlightened practitioners who are distributed through the numerous dependencies of the large civil and military hospitals of the city. To say that the important superintendence of this vast total of surgical departments is to be confided to the direction of our learned colleague, the principal Medical Officer, M. Cuvellier, is but to guarantee in advance the good management of an organization on which the Surgeon-in-Chief, Larrey, has bestowed so much anxious care. The army, if the fortunes of war so demand, will find behind it protection and shelter for more than eight thousand wounded.

Although it does not take rank among the Universities of Italy, the city of Milan has yet possessed, since the commencement of this century, an important Academic Institute, in which the principal branches of public instruction, the various sciences, letters, and the fine arts, are represented. Pensioned members and amateur investigators are charged with the examination of useful discoveries and the perfecting of every line of study. Established in an old convent of the Jesuits, the Breva Palace is interesting as much from its sculptural beauties, its library, its manuscripts, its pictures, its

frescoes, its coins, its observatory, and the rich collections of its botanical garden, as from its peculiar architecture. Imagine a spacious, quadrangular court, surrounded by two stories of arches, supported by double columns; opposite to the entrance, under a majestic vestibule, two stairways sending up their marble spirals, and reuniting at the next story on a common platform; on either side, two colossal statues, of Beccaria and Parini, and you will have a feeble idea of the impression of grandeur which one feels on entering this temple, raised in honor of genius, to the culture of the intellect. How much have I regretted, my dear friend, in the midst of these wonders, my inability to handle the pencil! How grandly would a sketch of Breva have inspired you, in the plans which they tell me you are pursuing to elevate our Algiers Medical School from the humble cradle of its modest infancy! Designs by Richini and Piermanni, a few marbles by Marchesi and Mon i, the funds secured in advance from our Algerian ediles, and you have, at one stroke, endowed our rising faculty with a monument worthy of its future destinies.

On the morning of the 12th we leave for Brescia. The air is damp and cold, the sky still heavy with clouds, which have darkened it regularly every evening since our arrival, and expend themselves during the night in violent storms. They call it only about twenty-five leagues from Milan to Brescia, and we must devote at least seven hours to the journey. Indeed, the Austrian army, fighting as it retreats before our advance guard, marches compact and in battle array. We are thus compelled to mass our entire force, and to advance in line, ready at any moment to give or to accept battle. When a hundred and twenty-five thousand men are thus thrown forward, followed by their baggage, their provisions, ambulances, artillery, munitions, reserves, etc., how is it possible to accomplish more than five to six miles in a march, over roads on which trains are hourly crossing each other's paths in inextricable confusion? This march by short stages, at the same time that it husbands the strength of the soldiers, gives us an opportunity to observe with a minuteness which cannot fail to be productive of useful results, the principal aspects and resources of the country.

The proverbial richness of the verdant plains of Lombardy justifies, perhaps even surpasses, their reputation. It is impossible to find fields more highly cultivated, greener meadows, more beautiful borders of mottled mulberries, or a more perfect system of irrigation. The design and first execution of the last belong, they assure us, to the Roman epoch. In striking contrast is the condition of the population of these regions, apparently so favored by Heaven. They appear wretched, emaciated, and in some places very generally affected by goitre. Is iodine, atmospheric air, or the saline element wanting in these beautiful waters, which, flowing always over beds of sand and gravel, come down so limpid and cool from the torrents and lakes of Upper Italy? Or must we attribute the prevalence of the disease to insufficiency of food, among

the villagers of the interior, immovably devoted to their diet of *polenta* (a porridge made from Indian corn)? As far as the influence of the water as an etiological agent is concerned, the analysis of numerous specimens collected from Milan to the Lake of Guardo and the Mincio, by our learned colleague of the Medical School, M. De Lille, Prof. Brauwers, the Apothecary Major, and his zealous co-laborer of the ambulance corps of the General Head-Quarters, Assistant Apothecary, Major Viltard, will undoubtedly afford valuable elucidations of one of the most vexed problems of pathogeny. If I may rely upon a distinguished physician of Brescia, the goitre really exists as an endemic disease in Lombardy, only at the very feet of the southern slopes of the Alps, and almost exclusively in localities whose topographical situation prevents their receiving the atmospheric currents of the northern winds. It would certainly be a matter of interest to verify this statement.

The majority of the cities which we pass through—Gorgonzola, Cassano, Triviglio, Romano, Cava, Calcio, and Travagliato—possess small civil hospitals, sometimes founded long since, and supported by donations and special legacies, in old convents or in buildings erected for the purpose; sometimes temporary affairs, dating from the last epidemic of cholera, and situated in private houses, awaiting a definitive organization. Several among the first class, as those of Gorgonzola and Travagliato, possess considerable architectural importance. Completing their deficiencies by sub-hospitals in the barracks, churches, castles, and large private houses, each of these establishments will be enabled, in case of an engagement, to furnish hospital accommodations, though it be but temporarily, to five or six hundred men. We do not leave these various lodging-places without having personally informed ourselves of the means of transportation which the local administration can place at our disposal in case of need, and every evening I address a very circumstantial report to the Surgeon-in-Chief on this subject.

Despite a heat at times Algerian in its intensity, and a dust often stifling, the sanitary condition of the troops is excellent. We notice as yet only a few cases of gastric derangement of a remittent type, and quite a number of returns of intermittent disease among the soldiers who belong to African regiments. Two principal causes seem to me to contribute to this otherwise unimportant affection: 1st, the cold nights, the soldiers not being provided with blankets for the bivouac; 2d, the immoderate use of water and adulterated liquors.

The art of adulterating wines must have had its origin with the sutlers of armies. To manufacture wine on the spot is an effective method of avoiding the expenses and risks of a difficult transportation.

℞.—Of water from the nearest ditch,
Alum,
Beet-juice,
Amylic alcohol (or any other cheap product of distillation), āā., q. s., according to the vintage or brand required.
Mix in an *old* cask.

The recipe, you must grant, is expeditious, and besides, enables the maker to cheat the vigilance of the customs.

At last, here we are in Brescia—and undoubtedly likely to be for several days to come. My pen claims, in its turn, a little rest, after the long march that it has just accomplished.

Trusting, nevertheless, that you will not, like myself, find it too long, believe me

Ever yours, affectionately.

BRESCIA, *June 18th*, 1859.

On the Manna of Sinai, and the Manna of Syria. By M. BERTHELOT.

"They took their journey from Elim, and all the congregation of the children of Israel came unto the wilderness of Sin, which is between Elim and Sinaï. . . . And the whole congregation of the children of Israel murmured against Moses and Aaron; and the children of Israel said unto them . . . Why have ye brought us forth into this wilderness, to kill this whole assembly with hunger? Then said the Lord unto Moses: Behold I will rain bread from heaven for you. . . . And behold upon the face of the wilderness there lay a small round thing, as small as the hoar frost on the ground. And when the children of Israel saw it, they said one to another: *Manhu?* which signifies: What is it? . . . And the house of Israel called the name thereof Manna. . . . The taste of it was like honey. . . . And the children of Israel did eat Manna forty years. . . . They did eat Manna, until they came to the borders of the land of Canaan.—*Liber Exodi*, cap. xvi.

What is the substance described in the preceding recital, which figures so much in the history of the Hebrew nation, and the name of which serves as a type of a multitude of natural sugary substances? Can it be likened to any saccharine matter known in the present day? This is a very controverted question. Two principal opinions are current on this point: the one regards manna as a sugary exudation supplied by various shrubs, principally by the *Alhagi Maurorum* (Tourn.), a kind of saintfoin; the other opinion likens the manna of the Hebrews to a species of cryptogamous plant. In these days the origin of the manna gathered at Sinaï may be regarded as settled, according to the researches made upon the spot

by MM. Ehrenberg and Hemprich. "Manna," says Ehrenberg, "is found at the present time in the mountains of Sinaï; it falls upon the earth from the regions of the air (that is to say, from the top of a shrub, and not from the heavens). The Arabs call it *Man*. The indigenous Arabs and the Greek monks collect it and eat it with bread in the same way as honey. I have seen it fall from the tree, I have gathered it, brought it myself to Berlin with the plant and the remains of the insect." This manna flows from the *Tamarix mannifera* (Ehr.) Like a number of other mannas, it is produced under the influence of the puncture of an insect, the *Coccus Maniparus* (H. and Ehr.)

If the origin of the Sianï manna be thus established, it is not so with its chemical nature. And this is a subject the more interesting, because the chemical analysis can alone explain its character as a nutritive agent. The result of my researches among sugary substances has led me to make some experiments in this respect. I have operated upon the following substances, the one identical with, the other analogous to, the manna of Sinaï:—1st. The Manna of Sinaï; 2d. The Manna of Syria, or rather of Kurdistan.

1st. The Manna of Sinaï.

The specimen was given to me by M. Decaisne; it was produced from the *Tamarix mannifera;* it had been gathered and brought home by M. Leclerc, who accompanied the Princes of Orleans in a voyage to the East (1859—1860).

This manna presents the appearance of a yellowish syrup, thick, and containing vegetable remains. It contains cane sugar, interverted sugar, dextrine, and water. The weight of the water was about a fifth of that of the whole mass. Its composition, after the removal of the water and vegetable remains, was as follows:

Cane sugar	55
Interverted sugar (levulose and glucose)	25
Dextrine and analogous substances	20
	100

2d. Manna of Kurdistan.

The specimen was given to me by M. L. Soubeiran; it had been sent to Paris by Dr. Gaillardot. It had been gathered on the mountains of Kurdistan, to the N. E. of Mossoul. Subjoined is the information on this subject in a letter addressed to M. Gaillardot by M. Barré de Lancy, then Chancellor to the Consulate of France at Mossoul. This manna "falls without distinction on every plant in July and August, but not every year; there has been very little for the last three years. It is gathered by cutting the branches, which are left to dry for two or three days in the sun, when they are shaken, and the manna is obtained, which falls like dust. The Kurds use it without purifying it. They mix it with dough, and even with meat." The matter presents itself under the form of a pasty mass, almost solid, impregnated with vegetable matter, and especially with the leaves of the nut-gall tree. It contains cane

sugar, interverted sugar, dextrine, water, and, lastly, a small quantity of green waxy matter. This is the composition of the part soluble in water:

Cane sugar	61.
Interverted sugar (levulose and glucose)	16.5
Dextrine and analogous substances	22.5
	100.0

From the preceding results, we see that the manna of Sinaï and that of Kurdistan are essentially composed of cane sugar, dextrine, and the products of the alteration, without doubt, of these two principles. Their composition is almost identical, a result the more belong to two extremely different species. Nevertheless, this phenomenon is not without analogy. Thus we know that the singular, because the plants which produce these two mannas honey gathered by bees from very different flowers possesses a composition almost identical. This is not the only comparison which may be made between honey and the manna in question. Not only do insects concur equally in the formation of honey and that of the manna of Sinaï, but further, this manna, as well as honey, is composed of cane sugar and interverted sugar; the manna of Sinaï contains, beyond this, dextrine, and the products of its alteration.

If we return now to the historical recital of the manna of Sinaï, it is easy to explain the use of this substance as a food. In short, it is a true honey, perfected by the presence of dextrine. We see, at the same time, that the manna of Sinaï does not suffice as an aliment, since it does not contain the nitrogenous principle. Therefore, animal food is associated with it, as well in the actual usage of the Kurds as in the biblical narratives.—See Exodus xvi. 8—13. *London Pharm. Journ., Nov.*, 1861, *from Comptes Rendus.*

Aspidine is the name given by Pavesi, of Mortara, to the following preparation containing the active principle of the root of male fern: 1 kilogr. of recently dried powdered root is displaced by alcohol, and then by water; the two liquids are mixed, the alcohol distilled off, and the residue boiled for a few minutes with 75 grm. slacked lime. After 24 hours rest, the precipitate is washed with water, dried and exhausted by boiling alcohol; the solvent is evaporated, when an oleo-resinous substance is left, possessing an acrid bitter and nauseous taste. It may be given in pills or in alcoholic and ethereal solution.—(Giorn. di. farmac. c di chim. di Torino.—Archiv d. Ph. cvii. 231.

On the Fluid Extract and the Syrup of Ipecacuanha. By WILLIAM PROCTER, JR.

An alcoholic fluid extract of ipecacuanha has been recommended by the committee of the College of Pharmacy as a means of making the syrup. This extract is made of the strength of an ounce to the fluidounce by evaporating the tincture made with alcohol .835 till reduced to the proper strength. This fluid extract contains the resin of the ipecacuanha, and its odorous fatty matter and wax, in part. When such fluid extract is employed to make the syrup by simply adding it to simple syrup, cold or hot, a cloudy syrup is obtained, which, while it is efficient and keeps well, separates by standing, and does not present a handsome appearance. With a view to remedy this objection, it is proposed to rid the fluid extract of all matter insoluble in cold water, so that when added to simple syrup it shall produce a transparent medicated syrup.

The following formula is recommended:

Take of Ipecacuanha, in fine powder, 16 ounces (troy);
Alcohol,
Water, of each a sufficient quantity.

Mix the ipecacuanha with six fluidounces of alcohol, pack it firmly in a conical percolator, cover it with a disk of muslin, and pour on alcohol until three pints have nearly passed, or until the drug is exhausted. Distil off the alcohol from this tincture till a syrupy residue remains, throw this into a pint of water, boil it until the last traces of alcohol disappear, the liquid becomes nearly clear, and the waxy oleoresinous matter separates and adheres to the vessel. When the solution cools, filter it through paper; and if it does not measure eight fluidounces, mix the residue with sufficient water to make that measure; but if it measure more, evaporate it carefully to that bulk. To this add eight fluidounces of alcohol, and mix.

Thus made, fluid extract of ipecacuanha is a dark reddish-brown liquid, having the odor of ipecacuanha well marked after standing awhile, and mixes with water and syrup to form a transparent solution. If the process is carefully conducted, it fully represents the drug, as Pereira states that the waxy matter separated from the tincture is not possessed of emetic properties.

Syrup of Ipecacuanha.

Take of Fluid Extract of Ipecacuanha, a fluidounce;
Simple syrup, thirty-one fluidounces.
Mix them.

Thus prepared, syrup of ipecac has a fine bright color, is transparent, and may be made without heat, and, in fact, extemporaneously. It may be well to mention that in the forthcoming Pharmacopœia it has been proposed to increase the strength of this preparation to ʒj to Oj, which is double the present strength, and equal to that of the wine. This will be a great improvement, and to make such syrup it will be simply necessary to mix a fluidounce of this fluid extract and fifteen fluidounces of simple syrup.—*Am. Journ. Pharm.*

"*Certain Public Necessities.*"

A London medical journal devotes an article to the establishment of "Certain Public Necessities." It says:

"There are few sanitary questions which affect more immediately individual comfort and health than those involving an inquiry into the due provision of the means by which the out door population and strangers of a great city may readily and decently 'relieve nature.' There are none which may be more appropriately discussed by the medical press; and there surely cannot be a point relating to the necessities of our common humanity upon which there exists less scope for false modesty in discussing it than the one upon which we now purpose commenting.

"Every one meets here upon common ground, for no respect has been shown to persons. Man and woman, the roughest and the gentlest of our race, all ages, the old man and the child, the sound and the sick, must yield alike to the calls of that nature with which they have been every one endowed. These calls we all know are imperative; sooner or later they must be obeyed; the time for which they may be disregarded with comparative impunity is but short under any circumstances, and under some almost inappreciable. Generally, if not attended to at once, great discomfort, or even disease, is the consequence. If such be the case when the body is in the possession of youth and health, how much more important is it that our physiological necessities be not unheeded when sickness or advancing years are influencing the frame. Inability to evacuate a distended bladder, or to relieve an irritable bowel, becomes a torture to the mind as well as to the body, of the severest kind. The agony is sometimes almost unendurable. Life is rendered truly a misery to some people from the knowledge or the dread that if they once leave the privacy of their own home they may be quickly so circumstanced as to place—and very painfully, too—that life in imminent danger.

"Now, it would naturally be supposed that to meet these stern wants communities would, as a matter of course, make such public as well as private arrangements as might insure their requisitions being easily and conveniently fulfilled. Disagreeable as the public confession of them may be, yet, as it is a necessity none are exempt from, we can the more readily put up with its explicit admission. Until within a very recent period, however, the conveniences accessible by the people at large were absolutely next to nothing. Even at present they are extremely few in number, and have reference to one exigency, and to a single sex. In order that the outdoor world of a great city may feel at ease *quoad* the important physiologic necessities we are discussing, it should have the means of ready and modest access to *urinals*, *water-closets*, and *lavatories*. We do not, of course, pretend to say that the government or any other public body is to supply the populace with all of these gratuitously. That would be out of the question as regards water-closets and lavatories. But as respects urinals not so, and for this

XUM

it is that the demand is more urgent. Of such essential conveniences there should be provided at the public expense an ample number, and in such important thoroughfares, and withal so unobtrusively situated, as to be as readily found as they are modestly approachable. To be able always to combine the latter qualifications may be somewhat difficult, but under any circumstances we should be immeasurably better off than with the old stone boxes of the bridges, corners of public houses, and the warning sign-boards at the entrance of dirty gateways and yards. Most of these were even more indecent than they were public, if that were possible."

The Ladies' Sanitary Association of London.

This association is extending the sphere of its usefulness wider and wider. The tracts are not only widely circulated in England, but they have reached continental cities, where the health authorities have in many instances reproduced them. A London contemporary thus speaks of the sphere to which this excellent association devotes its labors:

"It enters the mechanic's room and the poor man's cottage, and talks, in a woman's voice, to mechanics' and poor men's wives. It points out that though the court may be drained, or the cesspool removed, the living room must have its windows opened; that though the infant may have been vaccinated, it must be fed and clothed in a proper manner; that notwithstanding warm underclothing and coals have been supplied by the parish or by public charity, soap and warm water must be provided at home. The children laid up with scarlet fever may have been seen by the doctor, but his aid will be but trifling if they are left half suffocated in the close atmosphere which reeks up from a dirty and slovenly bed. The mothers of families are taught that true economy exists not simply in buying in a cheap market, but in knowing how afterwards to employ their bargains to the best advantage. There is a good cheap cookery, as well as a bad cheap one; an effective cheap mode of dressing, as well as an inefficient cheap style of apparel. The former are shown to be easily substituted for the latter. These are, after all, things in which most reform is needed within the poor man's dwelling, and which reform, when decorated by the thrift and comfort of hygienically regenerated wives and daughters, will do more towards the winning of our working men from skittle-grounds and gin-shops than a millennium of Exeter Hall demonstrations."

AMOUNT OF SILVER IN PHOTOGRAPHS.—Dr. J. J. Pohl, of Vienna, has estimated the silver in positive photographs taken upon ordinary albuminated paper. After drying them at 100° C. (212° F.), he found 0.116 per cent. equivalent to 0.125 per cent. oxide and 0.183 per cent. nitrate of silver. The value of the material is, therefore, very insignificant.—*Zeitschr. f. Photogr.*

FOSSIL FEATHERED REPTILE.—The announcement made to the geologists of Germany, about three months ago, by Hermann Von Meyer, that he had obtained from the lithographic slate of Solenhofen, in Bavaria, a fossil impression of a feather on the upper and under surface of a split slab, and that this feather was undistinguishable in its appearance from that of existing birds, attracted but little attention beyond palæontological circles. We had already evidences of birds from the green sand; and the discovery of birds in the Solenhofen oolite would merely lead us to connect the osseus remains still more closely with the evidence of avian footprints discovered by Hitchcock in the Triassic sandstones. Von Meyer's feather, which he termed *Archæopteryx*, is, however, completely eclipsed in interest by the intelligence made public by the venerable A. Wagner, of Münich, that in the collection of M. Häberlein, of Pappenheim, exists the skeleton of an animal undoubtedly of reptilian organization, as indicated by the vertebral column and form of the pelvis, and offering most analogy to the genus *Ramphorhynchus*, or long-tailed *Pterdactylus*. It approaches the class birds by its trifid metatarsals, and by having developed from a flat bone near the *ulmar* and *radius*, and supposed to be a carpal, a radiate fan of feathers, similar to those of birds. At the apical extremity of the tail is another radiate fan, also of feathers. The rest of the animal appears to have been destitute of plumage. Unfortunately the head is wanting. This anomalous form is referred by Wagner to the order *Pterosauria*, and has been generically distinguished by the term *Griphosaurus*, from *griphos, an enigma.*—*Med. Times and Gaz.*

INFLUENCE OF SILICIC ACID ON FERMENTATION.—J. C. Leuchs states that silicic acid precipitated from water glass produces fermentation in saccharine solutions, particularly after the addition of some tartaric acid, and generates the odor of beer yeast, afterwards of fruits, and finally of ether; in very dilute solutions the odor of putrid yeast appears. Silicic acid does not lose this property by boiling with water, or by repeated employment for fermenting and subsequent washing with water. A solution of sugar, containing alcohol and tartaric acid, fermented briskly with silicic acid, from which the gas was evolved, and amid the separation of a yeasty foam.—*Dingler's Polyt. Journ.*

TO RECOGNIZE GRAPE SUGAR BESIDE CANE SUGAR.—O. Schmidt employs trisacetate of lead and ammonia, which produce with both sugars white precipitates, which after a while, particularly when heated, assumes a red color in the presence of grape sugar, but remains unaltered by cane sugar; a small quantity of the former mixed with a large proportion of the latter may thus be recognized by the red tint of the precipitate.—*Ann. der Chem und Pharm.*

Experiments on the Best Mode of Correctly Estimating the Per Centage of Alcohol Existing in Wines. By JOHN HORSLEY, F.C.S., London. Analyst to the County of Gloucester.

First, note the specific gravity of the wine to be tried, say that compared with distilled water at 1000, it is .997, or 3 short of that number; then take 5 fluid ounces of the wine and evaporate it by rapid boiling in a sufficiently capacious flask to 2 ounces; then place the flask in a pan of water for a short time to cool. By this operation you will have expelled not only all the spirit, but a good portion of water with it.

Next make this residuary liquor containing the sugar and other extractive matter of the wine, minus its alcohol, up to the original bulk with distilled water, and take its specific gravity, which in this case will be 1.020. If this excess of 20 over the weight of the standard of distilled water be deducted from the specific gravity of the wine thus,—

.977 including its spirit, water, and other extractive matter of the grape;
20 amount of extractive matter in the water only;

.977 will be the true specific gravity of the spirit and water contained in the wine, minus the extractive matter, which is equal to 17 per cent. of alcohol, according to the published tables of alcoholic strengths at different densities and temperatures.

Or, which is nearly the same thing, we may proceed by subtracting the specific gravity of the wine, .997, from the residuary liquor, thus 1.020
997

leaving .23, which, deducted from the standard of distilled water 1000
23

leaves .977 as the true specific gravity of the spirit and water in the wine.

These examples may be further verified by a distillatory experiment thus:—Take 5 ounces of the wine; distil off exactly half by a gentle heat from a graduated retort to which a receiver is connected till oiliness ceases to form in the tube end of the retort, indicating that all the alcohol has passed over. The specific gravity of this distillate (consisting of spirit and water) will be .955, equal to 34 per cent., which, divided by 2—as only half the bulk has been drawn over—gives 17 per cent. Or the distillate may be diluted with its own bulk of distilled water up to the original 5 ounces, when its specfiic gravity will be .977, equal to 17 per cent. of alcohol.

This per centage may be converted into Revenue proof spirit by rule of three sum, thus:—

Alc.	Wat.	Alc.	
As 49	: 51	: : 17	= 17.69 water.
			17 alcohol.
Proof -	-	-	34.69

Chem News, London, Oct. 19, 1861.

Homœopathy in Denmark.

We extract the following statement from a letter to the *Medical Times and Gazette*, dated Copenhagen, March 10th.

"Homœopathy, this apparently immortal folly of Hahnemann's, has not found a fertile soil in this country. The common sense of the population, and the great and well-deserved confidence enjoyed by the Medical Profession at large, has stunted the growth of this form of quackery amongst us. But as weeds will grow in the best cultivated garden, there are also amongst us a few followers of Hahnemann. These persons are allowed to dispense by themselves, and are not subjected to any control, as they do not write prescriptions; their trade is, however, confined to the lowest classes, sugar being much cheaper than medicine, which is certainly a consideration. No respectable medical man in the kingdom has embraced homœopathy; nor would any one condescend to meet a Homœopath in consultation, or to seriously discuss Hahnemann's principles; and we often wonder that, instead of punishing the followers of his by silence, so many distinguished medical men in England should have taken up the cudgels against them. As far as I know, there are only four Homœopaths in the whole of Denmark, viz., three in Copenhagen, and one in the country. One of the former was lately brought before the Criminal Court, when it was proved by a number of witnesses, on oath, that he had never made any examination of the condition of the patients who had come to consult him, but merely given them a piece of sugar and sent them away as fast as he could, in order to be able to 'do' as many as possible of a morning. Many persons suffering from gonorrhœa and syphilis were thus sweetly treated, and the results of the neglect may be imagined. A nursemaid, amongst others, who suffered from a severe form of syphilis, had been treated by the man for several weeks without his knowing anything of her complaint, and of course, without any warning having been given to her employers. He declared an apprentice, who suffered from common itch, to be affected with the king's evil, and refused to look at the skin of the patient. The same distinguished practitioner had already, previously to his last trial, been punished several times; once for giving testimony of death without his having seen the body; another time for not having cut down a man who had hanged himself; and again, for having treated a syphilitic

patient without looking at the ulcer. The only Homœopath practising in the country, is a clergyman in Jutland, who has already five times been convicted for quackery, and was the last time sent to prison for two months. The same man has also been convicted for abuse of his clerical powers. From all this I believe I am justified in stating, that Homœopathy had better shut up altogether in this country.—*Med. Times and Gaz.*, March 29th, 1862.

Borax in Milk.—Prof. Kletzinsky states that borax is often employed to prevent milk from turning sour, and to impart to it more consistence, so as to make it appear more cream-like. This addition is detected in the ashes by boiling them with alcohol acidulated with sulphuric acid; the presence of boracic acid is ascertained from the brown color of curcuma paper and from the green flame of the burning alcohol.—(Polyt. Centr. bl. 1861, 224.)

Detection of Paraffine in Wax.—Prof. Landolt, of Bonn, recommends to warm the wax with an excess of fuming sulphuric acid, (Nordhausen oil of vitriol); a complete destruction of the wax takes place, leaving a black gelatinous residue; paraffine is, under the same circumstances, very slowly attacked, and remains as a transparent layer, readily separated from the fluid portion. Wax containing 50 and 75 per cent. paraffine yelded 45 and 68 per cent.—(Schweiz. Zeitschr. f. Ph. vi. 170–171).

Paraguay Tea.—Dr. Stahlschmidt found that the distillate from Paraguay tea was opalescent, had a peculiar slight odor of tea and a taste resembling peppermint. From 18 lbs. he obtained 38 grm. caffeina = .44 per cent., or more than three times as much as Stenhouse, by the following process: The decoction was precipitated by basic acetate of lead, the decanted liquid freed from lead by sulphuretted hydrogen, evaporated, and the syrupy residue treated with hot benzole. On cooling, caffeina crystalizes in white needles, nearly chemically pure, which may be re-crystallized from water or alcohol.—(Poggendorf's Annalen, cxii. 441.)

Extractum Gentianæ.—Considering the presence of pectin and pectase in gentian root, and the conversɔn of the former by the latter under the aid of a moderate heat into nearly insoluble pectic acid, Feldhaus urges the propriety of exhausting the root by digesting it for several days at a temperature of 45° C. (113° F.) On expressing the aqueous liquid, floccules of the acid remain behind

intermixed with the ligneous portion of the root. The infusion is now evaporated to about ¾ the weight of the root employed, and mixed with an equal bulk of strong alcohol, and may now be easily strained; the residue is washed with 45 per cent. alcohol, strongly expressed, and is then almost inert and but slightly bitter. The alcohol is regained by distillation and the extract left on evaporation (4½ lbs. from 20 lbs. root) is rapidly and completely soluble in water, separating but few floccules on standing. Thus prepared, very little pectin remains in the extract, it not being completely insoluble in diluted alcohol; but aside from the rapid solubility, the extract has no pasty consistence and is not liable to mould. The same process is applicable to other extracts.—(Archiv d. Ph. cvii. 294–298.

Castor.—Dr. F. G. Geiss reports that the beaver is still found in the neighborhood of Aken, on the Elbe, Germany, and that he has found the following method best for the preparation of castor: The sacs are carefully removed from the recently killed beaver, and freed from all adhering fat; the open end is loosely tied, and the sacs then subjected to moderate and gradually increased pressure to expel gases. As soon as the membranes adhere closely to the contents, they are repeatedly painted over with wood vinegar, and the weights are afterwards removed. Any gas still contained in the bag is expelled by puncturing the place with a pin; the bags are again pressed for 24 hours, the punctures are closed by a little collodium, and the whole left to dry in the open air, which is accomplished in from one to two weeks. The loss in weight is about one fourth of the original. The complete expulsion of the gas is necessary to prevent partial decomposition. Only the full grown male beaver yields a hard and rapidly drying castor; that of the female is softer, more difficult to dry, and notwithstanding all precautions, remains soft in some places.—(Archiv der Pharm. cvii. 306–308).

Tima, a New Remedy for Consumption, comes from Tampico, Mexico, and is used in the form of syrup, prepared by boiling the fruit, together with the seeds of Crescentia edulis, Derv., with sugar, and adding a little oil of almonds. Professor Walz analyzed the fruit, and found butyric, acetic, tartaric and malic acids, resin, sugar, gum, pectin, humin and lignine; the ashes contain potassa, soda, little lime, phosphoric acid, magnesia, alumina.—(N. Jahrb. d. Ph. xv. 426.

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The Pathology and Treatment of Venereal Diseases: including the Results of Recent Investigations upon the Subject. By FREEMAN J. BUMSTEAD, M.D. With Illustrations on Wood. 8 vo. pp. 686. Philadelphia: Blanchard & Lea, 1861. (Sold by J. H. Riley, Bookseller, Columbus, Ohio.)

This is a work of which American Medical Literature has reason to be proud, and one which, on the subject on which it treats, will take rank and precedence of all others, either on this or the other side the Atlantic.

Few persons could be found, whose reading and clinical experience would enable them to bring a greater fund of knowledge to bear upon the many knotty points involved in the discussion of venereal diseases, than our author; and that he has acquitted himself in a manner which will render his book a lasting monument of the American press, and secure the perpetual gratitude of his readers, will be readily assented to.

A work of this kind, it must be conceded, has long been a great desideratum. The far-seeing, philosophic mind of the immortal Hunter, enabled him to grasp and reconcile many of the difficulties in which preceding and contemporaneous syphilographers had involved themselves; but it has been mainly to the continued and carefully conducted observations and experiments of the French School, that we are indebted for the present advanced and rational views of the disease.

Since the publication of Ricord's valuable treatise on venereal diseases, no considerable work has appeared, nor any one which could be properly regarded as the true exponent of the teachings of medical science on this subject. Since then a period of ten years has elapsed—years of unexampled activity of mind in every direction—accumulating a vast store-house of medical facts, existing in monographs, and scattered over the pages of periodical medical literature.

Dr. Bumstead has availed himself of these rich sources of knowledge—and brought, withal, his own ample experience—in unraveling the apparent mysteries of the subject; has succeeded in bringing order out of chaos, and in presenting the whole matter in such

a clear, simple and intelligible manner as to divest it almost entirely of either obscurity or difficulty. In fact, Dr. Bumstead's book may be taken as containing what is *known* and *taught* on the pathology and treatment of venereal diseases at the present day, and as such, commends itself to every one who has any ambition to be found in the advance column of his profession.

On the subject of Gonorrhœa and its complications, which occupies the first half of the work, not much that is novel, either in the treatment or the nature of the disease, is advanced. Dr. Bumstead insists, however, at some length, on the fact that gonorrhœa originates frequently from other causes than intercourse with women affected with the disease: in coitus for instance, just after or immediately before the menstrual period; or with women suffering from leucorrhœa, and in a few instances, where nothing abnormal can be discovered in the female organs of generation, and the disease can only be attributed to the irritant character of the vaginal or uterine secretions.

"I have been convinced," he says, "by a somewhat extended observation, that gonorrhœa, originating in this mode, is of very frequent occurrence; of one thing I am *absolutely certain*, that gonorrhœa in the male may proceed from intercourse with a woman with whom coitus has for months, and even years, been practiced with safety, and this, too, without any change in the condition of her genital organs, perceptible upon the most minute examination with the speculum."

In this opinion he is sustained by Ricord, Diday, Fournier, and others of equal authority, who, it might well be supposed, are not ignorant of the many sources of error which might render such a conclusion fallacious.

Ricord says: "If we investigate with the greatest care the exciting causes of gonorrhœa—and I am now speaking of the most characteristic cases of the disease—we cannot help admitting a gonorrhœal virus is absent in the majority of cases. Nothing is more common than to find women who have occasioned the disease, unsurpassed in intensity and persistence, and attended with the most serious complications, and who are yet only affected with uterine catarrh, which is sometimes hardly purulent."

Diday says: "A man should never forget that gonorrhœa may be contracted from any woman; and I say *woman*, and *not* any

prostitute. I do not except from this uncivil remark any member of the gentle sex."

Fournier "thinks it less frequently contracted from contagion than from excessive coitus, repeated or prolonged sexual congress, or peculiar excitement during the act."

These opinions of the above authors, given at greater length, with that of numerous others, are cited by Dr. Bumstead to impress the reader with the grave importance of the subject, and the fearful responsibility resting upon the surgeon when passing judgment upon the virtue of a woman, and thus affecting her reputation for life, as well as the happiness of others with whom she is connected.

He insists that in all cases the woman should have the benefit of any doubt which may exist, and that no morbid apprehension of being imposed upon the patient, nor any hastily expressed opinion, should be blindly persisted in by the physician, when there is any risk of convicting an innocent person.

In the treatment of gonorrhœa, Dr. Bumstead admits the possibility of successfully practicing the so-called abortive plan; that, however, to be successful, the conditions upon which its success depends must be present. That the symptoms must not have become acute; that the discharge must be slight, and chiefly mucous; and little or no scalding of the urine obtain. Also, that the whole diseased portion of the urethra must receive a thorough application of the injection, and that as soon as sufficient artificial excitement has been produced, the injection must be suspended.

A failure to appreciate the importance of these several propositions has no doubt been the source of frequent disappointments, and sometimes even worse; and has tended to bring upon the plan of treatment the severe condemnation which justly attached to an unskillful or ill-judged application of it.

In carrying it into execution, Dr. Bumstead prefers the frequent injections of weak solutions to that of stronger ones used but once or twice; he usually uses a solution of the following:

℞. Nit. Argenti, gr. i—iss;
Aquæ Dist., ℥iv. M.

The manner of using it is perhaps the most important of all. For the benefit of those who may not see the work, we copy this at full length.

"The patient should be made to pass his water immediately before injecting, or, better still, a quarter of an hour before. We wish to clear the urethra of matter, and to have the bladder empty, so that the injection may have some time to act before it is washed away by another passage of urine; and yet a short interval between the last act of micturition and the injection is advisable, in order that as much of the urine as possible may be drained from the canal, and little be left to decompose the nitrate of silver. The prepuce should now be fully retracted, and the glans penis exposed. The latter should be wiped dry, so as to afford a firm hold to the thumb and finger of the left hand, applied to its opposite sides, and firmly compressing it around the point of the syringe, introduced to its full extent within the meatus. If this pressure be properly made, not a drop of the solution will be lost, as the piston of the syringe is slowly forced down by the forefinger of the right hand holding the instrument, and the whole contents will be discharged into the canal. The syringe should now be withdrawn, and the fluid still retained for a few seconds by continuing the compression of the glans. When the injection is allowed to escape, it will be found to be of a milky white color. This is due to the partial decomposition of the contained salt by the remains of the urine and the muco-pus of the canal. As this decomposition has prevented the application of the injection in its full strength to the urethral walls, a second syringeful should be thrown in, and retained two or three minutes. During this time, a finger of the disengaged hand should be run along the under surface of the penis, *from behind forwards*, so as to distend the portion of the canal occupied by the injection, and insure the thorough application of the fluid to the whole mucous surface."

It will be obvious that the above applications should be made by the surgeon himself, in order that they may be efficient. If the pátient, however, is intelligent and somewhat skillful, they may with safety be entrusted to him, after very special directions. These injections should be repeated every two or three hours, until the discharge, from being thin and mucous, becomes copious and purulent, and finally grows thin and watery, and sometimes slightly tinged with blood. This usually requires a period of twenty-four or thirty-six hours, during which time it is well to have prescribed an active cathartic. All medication should now cease; and if the

treatment has been successful, all the symptoms will disappear in four or five days.

The further treatment laid down by our author for the various stages, complications, and accidents of this troublesome and oft-times truly perplexing disease, are given with great minuteness and clearness, interspersed with many valuable formulæ for injections and anti-blennorrhagics, as well as valuable hints for hygienic and dietetic management.

The concluding remarks on the treatment of gonorrhœa proper may afford some aid and comfort to country surgeons and junior members of the profession, who are frequently much annoyed at the obstinate persistence of the disease, and unpleasant reflections by the patients.

Dr. Bumstead says: "The reader may be interested to know what is the average duration of treatment required, in the hands of the best surgeons, for the cure of gonorrhœa, laying aside those cases which are seen in the first stage, and which are speedily cured by the abortive method. *This may be estimated at from three to four weeks.* Greater success, on the average, is probably not attainable by any means with which we are at present acquainted."

We defer our remarks on Part II. until the next number.

R. M. D.

On Military and Camp Hospitals, and the Health of Troops in the Field. Being the Results of a Commission to inspect the Sanitary Arrangements of the French Army, and incidentally of other Armies, in the Crimean War. By L. BAUDENS, Inspector and Member of the Council of Health of the French Armies; formerly Surgeon-in-Chief and First Professor of the French School at Val-de Grace. Translated by F. B. HOUGH, M.D., late an Inspector of the U. S. Sanitary Commission. New York: Bailliere & Brothers, 440 Broadway.

Jean-Baptise-Louis Baudens, the author of the volume before us, has quite a large experience in army service. In 1857 he served in the medical corps of the French army in Algeria, where he gave clinical lectures. Afterwards he served in the hospitals of Lille, Strasburg, and Paris. He became also surgeon-in-chief of the military hospital of Val-de-Grace in Paris. On the 25th of July, 1855,

he was appointed medical inspector to the French army in Corsica, Italy, and the Crimea, and his subsequent history is detailed in this volume. Returning to France, he prepared the volume before us, in an English dress. Having contracted the seeds of disease by his uncommon labors in the hospitals of Constantinople and the Crimea, he died from cancer of the liver, on the 27th of January, 1858.

Marshal Valliant, Minister of War, instructed Monsieur Baudens very fully, that he might turn to account the information derived from an inspection of military and field hospitals, and have the establishments of the French for restoring health in the East compare with those of previous wars.

The work is divided into three parts. Part I. THE CAMPS. Part II. THE FIELD HOSPITAL AND MEDICAL SERVICE. Part III. THE HOSPITALS AND THEIR DISEASES—TYPHUS IN THE CRIMEA.

Under the head of Camps, we have: Chap. I. Medical Topography of the Crimea. Chap. II. Rations. Chap. III. Camps and Shelters. Chap. IV. Clothing.

Under Field Hospital and Medical Service, we have: Chap. I. Infirmaries and Field Hospitals. Chap. II. Surgical Operations. Chap. III. The Physicians—Chloroform.

Under Hospitals and their Diseases—Typhus in the Crimea, we have: Chap. I. The Cholera. Chap. II. Hospitals at Constantinople. Chap. III. Scurvy and Typhus. Chap. IV. The Return of the Army.

Besides the above, we have an *Appendix*, embracing—1. Economy in the use of linen for dressings. 2. Alimentary regulations for the sick in the Sardinian army. 3. Summary of immediate amputations performed in the Crimea, received and treated in the hospital Gulhave at Constantinople. 4. Observations on several comminuted fractures of the thigh by bullets, resulting in cure when treated with Bauden's fracture-box. 5. Fractures of the femur, caused by projectiles, etc, 6. Observations collected by M. Beaufils, Aide-Major Physician. 7. Report by Mr. Thomas, Physician-in-Chief, upon the sanitary condition of Constantinople during the month of June, 1856. 8. Instructions relative to the establishment of a depot of convalescents in a part of the camps at Maslak. 9. Report of Dr. Marcet, chief of the medical service at Colchi. 10. Report to the Minister of War.

We have given the above synopsis of this volume, that the

reader may form some estimate of the character of the questions discussed. The Crimean war was fruitful of many things that ought to be turned to our account. The French and English have been moving their civilization along in a way that has made peace seem to be almost the abnormal condition. As a consequence, military surgery and military medicine have been largely the result of the labor of these two nations. The book before us, besides its purely professional information, contains much that proves how carefully these nations have provided and guarded things medical.

We have space for but a few extracts.

ALIMENTARY REGULATIONS OF THE SICK IN THE SARDINIAN ARMY.

"The following table shows the common rations of each meal (at 10 o'clock in the morning and four in the afternoon) in the Sardinian army, and was furnished to me by M. Comzetti, Chief Physician of the Piedmontese army corps. It is here inserted as a document worthy of examination:

	Oz. bread.	Oz. baked meat.	Oz. pie or vermicel.	Oz. rice.	Oz. bread for soup.	Pints broth.	Pints wine.
Diet	.....	.....	1.32	1.76	3.52	0.48	.....
Quarter ration	2.20	0.70	1.32	1.76	3.32	0.48	1.18
Half ration	4.40	1.40	1.32	1.76	3.52	0.48	0.36
Three-quarter ration	6.60	2.10	1.32	1.76	3.52	0.48	0.36
Ration	8.80	2 80	1.32	1.76	3.32	0.48	0.36

The ration of meat for a day is only 0.55 lbs., while in the French hospitals it is double that quantity. It would not be enough to maks a good broth; but they add, like the English, the juice of preserved meats, called "essence of beef." The distribution of food commonly takes place twice a day, at ten in the morning and at four in the afternoon. Besides these rations, the patients receive, at eight o'clock in the morning, if prescribed by the physician, some soup, coffee, with or without milk, a milk soup, or some chocolate; but this distribution is not general; it extends only to those of the sick who appear to need it.

The rigid diet includes only broths and jelly broths. The common diet is composed of soups in the following order of gradation: a half soup, morning and evening, two, three, and even four soups, if the physician prescribe them, or rather two soups, and coffee, alone or with milk, a milk soup, or chocolate. The soups of the diet are made at the option of the

physicians, either with farinaceous ingredients, like vermicelli and semoulia, or of broken bread.

Besides the articles above enumerated, they have a number of kinds that they term extra-ordinary, which enter into the daily distribution, and will be mentioned when we come to notice the other elements of their rations.

The common quarter ration is composed of two or three soups, and the quantity of bread, meat and wine stated in the table. With the quarter ration they may allow the patient the eight o'clock morning meal, with all the varieties above stated. With the quarter of the ration, the boiled meat may be replaced by chicken, veal or mutton, or by vegetables, such as potatoes, spinach, carrots, cabbages, turnips, etc., according to the season. They may also add two poached eggs, and 0.44 lbs. of cooked fruits or marmalade.

The two gills of *vin ordinaire*, usually added to the quarter ration, may be replaced by the same quantity of some generous wine, such as Bordeaux, Malaga, etc.

The half ration is composed of two soups, to which may be added for breakfast, at eight o'clock, another soup, coffee with milk, or chocolate, besides the quantity of bread, meat and wine given in the table. The half ration of boiled meat may be also replaced by a half ration of ragout, fowl, gelatine, veal, or roast mutton, or by half a ration of vegetables; but it excludes dried fruit and marmalade, whose distribution here forms an exception, and is only allowed in certain particular cases. Wine may be substituted in the same manner as in the quarter ration. The half ration of meat may be divided into two quarters, as, for example, a quarter of ragout and a quarter of vegetables.

The three-quarter ration usually remains as in the table, but in exceptional cases, a soup, coffee, alone or with milk, chocolate, and the quantities of bread, meat, and wine, given in the table, may be added as breakfast. The three-quarter ration of boiled meat may be replaced only by a three-quarter ration of veal, mutton, ragout, vegetables, or salad, fowl and gelatine being excluded. It may also be subdivided into a half ration or ragout, and a quarter of vegetables, or the converse.

The entire ration consists of the quantities of bread, meat, and wine, mentioned in the table. In the Crimea, in consequence of the inferior quality of the meat, and the special wants of the sick, it was permitted to add an extra ration of vegetables to that given in the table. Potatoe and fresh lettuce salads were, in consequence, often ordered for the scorbutic patients."

DEPOT FOR CONVALESCENTS.

We have the following instructions relative to the establishment of a Depot for Convalescents in a part of Camps at Maslak:

"1. *Organization.*—The canvalescents shall be divided by sections and arms, as much as possible, the effective maximum being 200.

2. The sections shall be commanded and managed by lieutenants, or sub-lieutenants, having under them sub-officers and corporals. They shall each be taken from among the convalescents, or in default of these, from the 84th line, which regiment shall always furnish for each section the sub-officer and corporal, who shall perform the duties of sergeant-major and quarter-master.

3. A captain, selected from the 84th, shall exercise supervision over the officers of the section in all that relates to discipline, internal police, orderlies, etc., and shall sign for the various sections such papers as orders for purchase, bills, etc. He shall be responsible to the council for the administration of the corps, with whom he is to confer directly, with regard to administrative affairs.

4. *Administration.*—The sections shall be placed under the general supervision of a superior officer, taken from the 84th, who shall direct the general service, secure a proper discipline, and employ the captain as his intermediary for transmission of his orders.

5. *Interior Regulations.*—Each section shall form an administrative unity, in the same manner as the companies of a corps.

6. The sections shall mess separately.

7. The mess expenses shall be the same as in the regular army corps. There shall be added a supplementary sum of five centimes (a cent) a day, which shall be devoted exclusively to the purchase of fresh or preserved vegetables.

8. There shall be allowed to each sub-officer and soldier present, including those charged with the command, a ration of wine daily, in addition to the regular ration of sugar and coffee.

9. The ration of provisions shall consist exclusively of bread, fresh meat, rice or dried vegetables, salt, sugar and coffee, at fixed prices, and the fixed allowance of fuel.

10. The additional ration of wine shall be distributed one half at each meal.

11. The ration of sugar and coffee shall be issued at about eight o'clock in the morning.

12. *Barracks and Encampments.*—The convalescents shall be placed in barracks instead of tents, and these shall be furnished with stoves.

13. To each man there shall be allowed a mattress and a bolster, which shall be placed upon the camp beds.

14. In the absence of camp beds, trestle bedsteads of wood shall be furnished.

15. The men shall be provided with camp blankets.

16. The utensils and other furniture for this service will be furnished from the public stores, upon the order and responsibility of the corps to which the men belong.

17. *Sanitary Service.*—The sanitary service shall be trusted to a physician of the grade of major, who shall be designated by the chief physician of the service of the hospitals at Constantinople. He will be assisted by one or more aides-major, according to the want of the establishment.

18. The men shall be taken out to walk, according to the direction of the chief physician, who shall limit the time, and if need be, shall cause the feebler ones to be attended by an aide-major.

19. A sanitary visit once a week; and those who are deemed able to rejoin the service will be sent to their corps. Pleasant days are to be selected, as far as practicable, for sending them off.

20. Such men as prove to be incapable of complete recovery at the depot of convalescents, may, according to circumstances, be sent to the hospitals, or may be allowed sick leave, or be sent to the depot of their corps. In these two latter cases, the major-physician charged with the duty shall furnish certificates of visit, which visit shall be made by the chief physician of the health service, in the presence of the brigadier-general.

21. The barracks shall be warmed only when the major-physician may deem it necessary.

22. One or more barracks shall be placed at the service of the major-physician, to be used as a regimental infirmary.

23. The medicines and dressings necessary for use in the infirmary, shall be supplied from the public stores, to be charged against the funds of the corps that may require them.

24. *Formation of the Depot—Sending to the Hospitals.*—The depot for convalescents shall be opened on the first of February next, and instructions shall be issued in time to enable the chief physician of the hospital service, and other accountable officers, to select and send to Maslak such men as they may deem proper to be admitted. Those whose duty it is to report lists of names, shall indicate the number of the regiment, the christian and family name, and the rank, and they shall be classified as infantry, cavalry, artillery, and engineers, and other arms. These lists shall be addressed to the military intendant, on the 28th instant, and shall be at once sent to the general commanding the military division.

25. The hospitals shall send their men, upon the first formation of the depot, in the following order:

February 1. Pera Dolma-Batche Military School and Parade-ground Hospitals.
" 2. Gulhane and the University Hospitals.
" 3. Daoud-Pacha Maltepe and Kamis-Tchifflick Hospitals.

26. The first formation shall embrace a section for each arm, and, if need be, two from the infantry.

27. The sections shall form a single series of numbers, and the designation of the arm shall be added to the number of each section.

28. After the formation, the hospitals shall send only upon certain days of the week.

29. The selections shall be made by the chief physician, at least forty-eight hours before sending. Lists, including details mentioned in article 24, and arranged according to the arms, shall be sent to the chief of the staff on the day before the day designated for the removal, in order that the commander of the depot may be prepared in time.

30. Such men as are known by the major-physician to be unable to walk the distance, may be sent in chairs or arabas, according as may be most convenient.

31. In all cases the administration will take charge of the transportation of all property belonging to the men, sent to the depot.

32. Each man sent by the hospitals to the depot shall be furnished with a ticket of discharge, which shall be at once sent to the major-physician, and by him returned to the men when they are sent to the stations of their corps. The tickets of the men entered at the hospital or sent to France, shall be lodged with the captain performing the duties of military sub-intendant, who shall forward them to the smaller depots of the corps, at the same time notifying the depots of the present location of the men."

In the present war we have had enough of experience with the sick and convalescents to indicate the erection of just such establishments as the above. After, for example, such a battle as took place at Shiloh, the disabled are of several varieties. Some are seriously wounded, others slightly; others sick from exposure, while a pretty large number are unfit for service, from temporary indisposition of various kinds. From these different classes occupying hospitals, *convalescents* soon make their appearance, soldiers not sick enough to remain in the hospitals, and yet not well enough for service in the field. At present we have no establishment looking to the care of this class in our army arrangements, and, as a consequence, furloughs are obtained and the soldiers wander over the country, either at their own or government expense, trying to make their way home.

This state of things we have at the present time, and from what has been stated, its influence upon the army in the field, not less than upon the parties themselves, has been unfavorable. Experience proves that it is best that the sick and wounded of the army be kept with it, especially the convalescents. The *organization* of such establishments, if the present war is to continue, should be entered upon at once.

Another matter akin to the one just noticed, is the

Scarcity of Surgeons just after a great battle.

A half day's battle sometimes sends to a hundred physicians in the field hospitals, six or eight thousand wounded at a time. What can they do? But little indeed to meet the exigencies before them. Our wounded, as a consequence, after such battles, have had to lie on the field for days without even as much as the

attentions of a nurse. At best the physician could not even place a single compress and bandage upon each wound, much less perform on each one the surgical operation indicated.

To supply this want there was created in the Crimea a class of attendants of subordinate grade, who rendered very important services. Among the convalescents were found men of education, bachelors of arts, etc., etc. These were retained for the purpose of assisting physicians, and were called "*soldier-dressers.*" The best physicians in the service at Constantinople were loud in their praise of this class of auxiliaries. When the typhus made such ravages that it was feared the army would be left without physicians, it was by the services of the "soldier-dressers" that a triumph was obtained over the serious difficulty. These subalterns evinced a care, zeal, and aptitude that couldscarcely have been expected. They were entrusted with the care of the visiting passbooks, the distribution of the food and medicines prescribed, the application of simple dressings, poultices, blisters, and similar services.

In the Russian army, "*Felchers*" take the place of these "soldier-dressers." They rank as sergeants, are a permanent class, and are usually recruited from among the orphans of soldiers dying in the service of the Empire. The government brings them up and gives them a crude education in surgery and military hygiene. In the hospitals of that country there is one "Felcher" to every seventy-five sick.

We have a summary of amputations, *immediate* and *delayed*, presented by the author. The tables show at once the great advantages in favor of amputations performed immediately after the wound over those in which a considerable length of time has elapsed.

The English reports are equally in favor of early amputation from severe injuries by gun-shot wounds. McCleod in his "Notes on the Surgery of the Crimean War," noticed in the Journal some months since, has collected facts showing that 1,288 cases of the greater amputations in various wars from gun-shot wounds were followed by death in 396 instances, while 902 secondary amputations were followed by death in 586 cases. The per centage of 30.7 in the former and 67.9 in the latter, nearly agrees with the experience of the Russians in the Crimean war, their loss being one-third of the primary and two-thirds of the secondary.

A comparison, to some considerable extent, of amputations with *Resections*, show very much in favor of the latter.

McCleod in his work on the Crimean war states that chloroform was very generally used, with but a single accident, while a great number of operations were successfully performed which would not otherwise have been attempted. The *morale* of the wounded was better sustained, and the courage and comfort of the surgeon increased.

The French surgeons also very generally gave chloroform in the Crimea. They supposed that by subduing pain, chloroform produced a mental calmness and tranquillity very favorable to recovery. It was also thought that it deprived the traumatic fever of an excess of reaction.

"But, used imprudently, this agent, while it takes away suffering, also may take away life. It shares this sad privilege with the most potent remedies. Taken in large doses, they are for the most part poisonous, and kill instead of curing. The danger may perhaps be certainly avoided by observing certain rules, and especially by not pressing the inhalation to its extreme limit. This extreme limit is, in my opinion, when, in accordance with the precept laid down for several years, we pass the stage of *insensibility*, and reach that of *collapse* and a complete muscular prostration. This condition is reached when a limb is litted up and falls like a mass of dead matter, for then *life almost borders on death;* it has retired into the vital centre, the medulla oblongata, at the origin of the eighth pair of nerves. * * * To approach this point is rash temerity; to reach it is death. * * * We ought always to stop when insensibility is reached; it is enough for the patient that the pain is alleviated."

We have quoted the author fully, because we regard his observations as eminently plausible, and that our surgeons in service, who may see this number of the *Journal*, may be prepared with good suggestions in regard to the use of chloroform. There may be a little speculation about the point in the nervous centres upon which chloroform especially exerts its force when it causes death. Still, the fact that the medulla oblongata is the source of the nervous power that keeps up respiration and circulation, since the conclusive experiments of Flourens, cannot be doubted. We have also quoted the author, that those who use chloroform freely in almost every variety of cases, and especially in obstetric practice, may be fully informed of how near, in many instances, they may carry their patient to the verge of the dangerous, merely for the purpose of disposing of a temporary or unimportant trouble. Chlo-

roform, in grave wounds, where the patient is in danger of exhaustion from the shock, or loss of blood, or mental excitement, is, without doubt, justifiable. But in the ordinary operations of surgery, or in obstetrical practice, for the purpose of getting rid of pain, its use is very questionable.

We must here close our notice of this little volume, and, in so doing, would recommend it cordially to the profession. The surgeons now in service in the army, a class for whom it has been more especially written, will find its perusal both agreeable and profitable.

Editorial and Miscellaneous.

Ohio State Medical Society.

This body convened at White Sulphur Springs, on Tuesday, 17th inst. The attendance was very fair for the times. The session lasted two days, and the proceedings will show the usual amount of business.

But one essay was offered for the prize. This was written by Dr. C. Culbertson, of Zanesville. The essay discusses the subject of Anæsthetics in Midwifery. To some extent the essay is founded on experiments by the author. From what we learned, the utility of chloroform is pretty freely advocated, and suggestions are given of the kind of cases benefited by its administration.

Prof. Blackman presented a synopsis of his Report on Surgery. Not enough was read to judge of its merits. From what, however, is known of the author's learning and experience, a very fine performance is expected.

The Report on Medical Literature was written by Dr. Reeve, of Dayton, and read by Dr. Armor, a member of the committee.

Prof. M. B. Wright, the President of last year, gave his valedictory on the "Medical Aspects of the Rebellion." We were at a loss to comprehend the "scope" of the paper. Quite a variety of questions were discussed touching the war, its causes, complica-

tions, and probable results; the false counsels and ignorance that have obtained; climatic influences; necessity of the times for statesmen, instead of politicians; differences, radical, between the people of the two sections, etc., etc. The paper wound up by asking the very important question—How can the rebellion be subdued? Doctors being expected to know everything, of course it was right to ask them such a question. The paper, like what generally proceeds from the author's pen, is smoothly and handsomely written.

The usual number and variety of resolutions were offered, and about the usual number of speeches made.

The Society was very well entertained by the proprietors, Messrs. Emery & Warden; and, after two days' session, adjourned, to meet next year at the same place.

Sixteenth Annual Session of the Ohio State Medical Society.

Reported by E. B. Stevens, M.D., Secretary.

OHIO WHITE SULPHUR SPRINGS, June 17, 1862.
10 o'clock A. M.

The Ohio State Medical Society met in the public hall, prepared for the use of the Society on this occasion, and was called to order by the President, Dr. M. B. Wright, of Cincinnati.

Neither of the Secretaries being present, Dr. E. B. Stevens, of Cincinnati, was appointed Secretary *pro tem.*

The President called for the report of the Executive Committee, but none of that committee being present, it was, on motion, agreed to adopt the order of business of last year.

On motion, the reading of the minutes of last year was omitted.

On motion of Dr. Kincaid, the President was directed to appoint a committee of five to nominate officers for the ensuing year. Drs. Kincaid, Reamy, Gans, Reisinger and Gordon were appointed that committee.

The committee on Admissions reported favorably on the names of Drs. J. T. Wood, of Williamstown; J. W. Brady, of Linnville; Roland Cadwallader, of Springfield; Chas. C. Cooke, of Youngstown; Henry W. Owen, of Mt. Vernon; Wm. Hays, of Milfordton; Alex. McBride, of Berea; A. F. Joseph, of Cumminsville; and P. J. Beverly, of Frankfort—all of whom were duly elected.

The committee on Nominations made their report, and the Society proceeded to ballot, with the following result:

President—J. W. Russell, M.D., of Mt. Vernon.

Vice-Presidents—G. C. Blackman, M.D., of Cincinnati; G. W. Boerstler, M.D., of Lancaster; J. M. Southard, M.D., of Marysville; B. S. Brown, M.D., of Bellefontaine.

Secretaries—E. B. Stevens, M.D., of Cincinnati; T. B. Williams, M.D., of Delaware.

Treasurer—John Thompson, M.D., of Columbus.

Librarian—R. Tompson, M.D., of Columbus.

Committee on Admissions—Drs. Kincaid, Reamy, Gans, Gordon, and Reisinger.

Drs. M. Dawson and Patterson were appointed a committee to wait upon the President elect, and escort him to the chair.

Upon taking his seat the President made a few appropriate remarks, acknowledging the compliment paid by the State Society in selecting him to preside over its deliberations for the ensuing year.

On motion of Dr. Kincaid, the address of the retiring President was made the special order for to-morrow afternoon, at 2 o'clock.

The President called the standing committees.

Dr. Boerstler, chairman of the committee on Uterine Diseases, apologized for inability to make a full report; and, on motion, the committee was continued for another year.

Several committees announced their presence, and readiness to report during the session.

Dr. Wright made a statement concerning the condition of his report on Obstetrical Surgery; and, on motion of Dr. Landon, discretion was granted Dr. Wright to report at the present session, or be allowed another year.

The Society took a recess until 2 P. M.

TWO O'CLOCK P. M.

The President, Dr. Russell, in the chair.

The committee on Admissions presented the names of Drs. S. O. Almy and George Fries, of Cincinnati, who were elected.

On motion of Dr. Landon, the making of Dr. Wright's address the special order for two o'clock Wednesday, was reconsidered and set for 10½ o'clock forenoon.

The Treasurer, Dr. Thompson, made his annual report, which, on motion, was referred to the committee on Finance.

Dr. Armor, from the committee on Medical Literature, proceeded to read the report of that committee, which had been prepared by Dr. Reeve. On motion, the report was referred to the committee on Publication. Pending the reference, the report was briefly discussed by Drs. Kincaid, Reamy, and others.

Dr. Wright, from the committee on Prize Essays, stated that but one essay had been submitted to the committee, which would be reported on at an early hour.

On motion, adjourned until 9 o'clock to-morrow.

SECOND DAY.

WEDNESDAY, June 18, 1862.

The Society met, the President, Dr. Russell, in the chair.

The minutes of yesterday were read and approved.

The committee on Admissions presented the names of Drs. T. P. Gruwell, of Damascoville; F. M. Andrews, of Dayton; W. H. Matchett, of Ithaca; E. Hyatt, of Delaware; A. H. Thompson, of Circleville; P. H. Clark, of Ashland—all of whom were duly elected.

Dr. Kincaid, from the committee on Finance, presented the following report:

To the Ohio State Medical Society—

The committee on Finance, to whom was referred the report and vouchers of the Treasurer (Dr. John B. Thompson), repectfully report that we have carefully examined the same, and find his accounts correct as reported to the Society; and the entire indebtedness of the Society is $45 81.

Your committee would recommend the assessment on each member, for the present year, of *one dollar*, to pay its present indebtedness and defray its annual expenses.

Respectfully submitted,

W. P. KINCAID,
G. W. BOERSTLER,
C. P. LANDON.

Drs. W. H. Matchett, of Darke county, and C. Falconer, of

Butler county, presented their certificates as delegates from their respective societies, and took their seats.

Dr. M. B. Wright, from the committee on Prize Essays, reported that in the absence of Dr. Rogers, of Springfield, a member of that committee, Dr. Reisinger was appointed to fill the vacancy; and that only one essay had been submitted to the committee, but upon its examination the committee regarded it as well worthy of the prize medal which had been offered by the Society—and they accordingly so recommend. Upon breaking the seal of the accompanying note, it appeared the author was Dr. H. Culbertson, of Zanesville.

On motion, the committee on Prize Essays was requested to have a gold medal prepared in accordance with the original resolution, to be presented to Dr. Culbertson at the meeting of 1863.

Dr. Landon offered the following resolution:

Resolved, That it be the duty of each member of this Society, upon the death of any member of the Association in his community, to forward to the committee on Obituaries such facts and information as will enable said committee to prepare a just and proper notice.

Dr. Blackman read a synopsis of his report on Surgery, which, on motion, was laid on the table for the present.

The following letter was read, from Dr. Dodge, chairman of the committee on Ethics:

The committee on Ethics beg leave to report that but one case of professional delinquency has been brought to their notice the past year.

The Montgomery County Medical Society notified the committee at the last annual meeting, that Dr. Oliver Crook had been expelled for unprofessional conduct. The committee informed Dr. Crook, by letter, that his case would be acted on at the ensuing annual meeting.

Respectfully submitted,

I. S. Dodge,
Chairman of committee on Ethics.

The communication was laid on the table.

The hour having arrived for the address of the retiring President, on motion, Drs. M. Dawson, Weber and Sweney were appointed a committee to wait upon the ladies and invite them to be present.

Dr. Wright proceeded to deliver his valedictory, announcing as his topic "The Idolatry of our People; or, the Rebellion in its Medical Aspects."

The delivery of the address was followed by considerable discussion, participated in by Drs. Murphy, Kincaid, Reamy, John Dawson, Wright and Falconer. Finally, on motion of Dr. Gordon, the address was referred to the committee on Publication, and, as amended by Dr. Thompson, with instructions to publish.

Dr. W. W. Dawson, of the committee on Publication, presented the following report:

The Publication Committee would make the following report: Two hundred and thirty-five copies of the Transactions of the Society have been published, at an expense of $149 61.

W. W. Dawson, Chairman.

On motion, report accepted.

Society took a recess until 2 P. M.

AFTERNOON SESSION.

Vice-President Blackman in the chair.

Dr. Gordon read a volunteer paper, giving an account of a case of hydatids of the uterus and disease of the left ovary.

On motion of Dr. Weber, the paper was referred to the Publication committee, with instructions to print.

Dr. Jno. Dawson offered the following resolutions:

1st. *Resolved*, By the Ohio State Medical Society, now convened at the White Sulphur Springs, that the President of the United States be requested to avail himself of the first opportunity to effect an exchange of prisoners of war.

2d. *Resolved*, That this Society fully appreciate the wisdom and humanity of the recent agreement of the authorities North and South, of regarding surgeons in service as non-combatants.

After considerable discussion, on motion, the first resolution was laid on the table, and the second adopted.

Dr. Plympton offered the following:

Resolved, That the publication of any address, prize essay, or other paper by this Society, is no evidence of its indorsement of the sentiments therein contained; and that this resolution be pre-

fixed to the introductory page of each future volume of Transactions.

On motion, adopted.

Dr. Landon offered the following:

Resolved, That when this Society adjourn, it adjourn to meet at the Ohio White Sulphur Springs, on the third Tuesday in June, 1863.

Adopted.

Dr. Weber offered the following:

WHEREAS, The history of wars of all nations has proven that the dangers surrounding a surgeon on duty are far greater than those encompassing the soldier with a weapon of destruction in his hand—the mortality of surgeons being far greater in proportion than the mortality of officers on duty in the different grades of the army; and,

WHEREAS, That same history furnishes as noble examples of heroism of medical men on the bloody field of battle as ever the lives of true and great heroes can show; and,

WHEREAS, The fields where now the battles for our liberty and independence are being fought, daily witness the heroic conduct of our professional brethren, now surgeons in the grand army of the Republic, truly worthy of Paré, Larry or Strohmeyer; therefore,

Resolved, That a committee of three be appointed to draw up a memorial to the Governor of Ohio, asking him to use all his influence with the proper authorities, to place the medical man in the army on the same footing with officers of the same grade, as to brevets and marks of distinction for gallant conduct in the performance of his duty.

Resolved, That a copy of the above preamble and resolution be furnished to the Presidents and Secretaries of the different State Medical Societies of our country, with the request of co-operation.

The preamble and resolution were discussed at length by Drs. Weber, Wright, Boerstler, John Dawson, Johnson, and Dorsey.

Dr. Dorsey offered the following substitute for the resolutions of Dr. Weber:

Resolved, By the Ohio State Medical Society, that the Governor of the State be and he is hereby requested to use all his power and influence with the proper department, to give such efficiency to the corps of surgeons in our armies, both in respect to numbers and

authority, as may enable them to perform their duties in caring for the health, and relieving the casualties of the soldier.

Adopted.

Dr. Weber then asked permission of the Society to withdraw the preamble presented by him. Granted.

Dr. Landon offered the following:

Resolved, That the Secretaries prepare a correct list of the names of members in attendance, and the same be published in connection with the Transactions.

Adopted.

On motion, Dr. Blackman's report was taken from the table and referred to the Committee on Publication, with instructions to publish.

Dr. Kincaid offered the following:

Resolved, That the thanks of this Society be and are hereby tendered to the retiring officers, for the able, dignified and courteous discharge of their several duties.

Adopted.

On motion of Dr. Davis, the report of the Committee on Ethics was taken from the table, and a committee, consisting of Drs. Davis, Armor and Reeve, were appointed to prepare charges against Dr. Crook by the next meeting of the Society.

On motion of Dr. Landon, it was—

Resolved, That the thanks of this Society be and are hereby tendered to the proprietors of the Ohio White Sulphur Springs, for the use of the fine and commodious hall prepared for the sittings of the Association, and for the kind and gentlemanly attentions received during our stay with them.

The President announced the following committees for the ensuing year:

STANDING COMMITTEES.

Executive.—T. A. Reamy, M. Dawson, T. B. Williams, P. Beaman, J. Davis.

Finance.—C. P. Landon, W. W. Dawson, J. S. Reisinger, E. L. Plympton, B. Raymond.

Publication.—E. B. Stevens, T. B. Williams, D. S. Gans, J. Helmick, S. O. Almy.

Medical Ethics.—T. W. Gordon, R. Gundry, W. P. Kincaid, G. W. Boerstler, B. S. Brown.

Medical Societies—R. Wallace, J. M. Snodgrass, T. A. Reamy, E. Gaston, M. Dawson.

SPECIAL COMMITTEES.

Surgery.—G. C. E. Weber, George Fries, J. W. Hamilton, M. Dalton.

Medical Literature.—H. Culbertson, T. A. Reamy, T. B. Williams.

Obstetrics.—D. S. Gans.

Microscope.—G. C. E. Weber.

Uterine Diseases.—G. W. Boerstler, W. H. Reeve.

Obstetrical Surgery.—M. B. Wright, A. Wilson.

Practice of Medicine.—John A. Murphy, C. Landon, W. H. Matchett.

Obituaries.—C. P. Landon, J. Davis, T. W. Gordon.

New Remedies.—E. B. Stevens.

Legal Duties and Privileges of Medical Witnesses.—R. Gundry.

Insanity.—R. Gundry.

Asthma.—T. A. Reamy.

Delegates to the Indiana State Medical Society.—Blackman, Stevens, Beaman.

Delegates to the Kentucky State Medical Society.—Kincaid, Gordon.

On motion, adjourned to meet at the White Sulphur Springs on the third Tuesday in June, 1863.

JNO. W. RUSSELL, *President.*

E. P. STEVENS, } *Secretaries.*
T. P. WILLIAMS, }

BOOKS RECEIVED.—We have on our table, for future notice—

Gray's Anatomy. New edition. Second American, from the last London edition. Philadelphia: Blanchard & Lea.

A Practical Guide to the Study of Diseases of the Eye. By Henry W. Williams. A new work. Boston: Ticknor & Fields.

Barclay on Medical Diagnosis. Second American, from second London edition. Philadelphia: Blanchard & Lea.

Guthrie's Commentaries on the Surgery of the War in Portugal, Spain, France, and Netherlands, with Additions relating to those in the Crimea in 1854–1855. Sixth edition. Philadelphia: J. B. Lippincott.

The above works are all for sale in our bookstores.

Dr. Hayes.—This gentleman, who was charged with the care of the wounded after the battle of Port Republic, and was reprimanded and dismissed from the service for the alleged offense of going to bed in Washington after the arrival of the cars, and before the wounded had been properly provided for, is out in a card of self-defense, in which he states that the men and officers in his charge not only fully exonerate him from blame of any kind, but bear testimony to his faithfulness under circumstances the most difficult and trying. We should be very glad to find that Dr. Hayes has been sinned against in the summary dealings with him; for nothing could possibly strike the medical mind more unpleasantly than to hear that a charge of "gross neglect" was sustained against one of its members at a time when so much every way was at stake.

White Sulphur.—This place has again been selected for the meeting of the Society next year. We think well of the selection. Situated in a beautiful agricultural region, on the west bank of the Scioto river, the springs delightful to behold, the houses new and commodious, the proprietors attentive and fully up to the times in their way, the place has much to commend it, to those whose vocation knows not even the Sabbath-day for rest, as a point for spending a little time.

We were informed by the proprietors, Messrs. Emery and Warden, that they are prepared to accommodate a large number of visitors the present season. We should think those entrusting themselves to the care of these gentlemen at this watering-place, during our hot months, would be very favorably impressed. Dr. O. S. Almy, of Cincinnati, a gentleman of fine capabilities, will be the resident physician during the season.

STARLING MEDICAL COLLEGE.—We call attention to the advertisement in this number of Starling Medical College. As heretofore, it will commence in October, and continue until the first of March.

Possessed of all the modern facilities for teaching, this institution is fully prepared to impart a very thorough course of information.

The alumni of the institution, it is gratifying to know, have acquitted themselves very cleverly in the examinations through which they have passed for appointment as army surgeons.

THE OPHTHALMOSCOPE.—We learn from a letter in the *American Medical Times* that the ophthalmoscope is now in quite general use in English hospitals. We quote the following extract:

"I am very glad to find that in the ophthalmic hospitals of London and the provinces, as well as in the military hospitals and at Chatham, the *ophthalmoscope* is in general use, and highly appreciated. In no branch of our art have I seen such decided improvement within the last twelve years since I was here, as in ophthalmic surgery; and much of this progress is owing to our being able to explore the deep textures of the eye by the ophthalmoscope. This admirable instrument was nearly perfect when introduced a few years ago by Helmhoz; and now there is but one opinion as to its effectiveness, and to its immense importance in enabling us to investigate diseases, especially of an obscure nature, in this delicate organ. And what surprises me is to see the degree of tolerance of such examinations, in almost every kind of ophthalmic disease; a result we certainly should not have looked for *a priori*. Temporary dimness of vision may in some cases be induced by its use; but by a proper regulation of the quantity of light admitted into the eye, we may employ it with advantage in acute glaucoma, or even in retinitis. A metallic speculum is now preferred for the instrument, instead of glass, as it is more portable and less brittle, has a small, thin-edged sight-hole, and but one reflecting surface. Besides, a metal reflector always gives a clearer and better-defined image than a glass one. It is true that some experience is necessary to enable one to derive all the advantages from this instrument of which it is capable; but the same may be said of the stethoscope or any other instrument. *The division of the ciliary muscle* of the eye for glaucoma, opacity of the cornea, etc., may also be mentioned,

as evidence of progress in the treatment of this class of diseases. This operation I saw performed several times, and very skillfully, by Mr. Hancock, of the 'Royal Westminster Ophthalmic Hospital,' and with decided benefit. Thus, out of 511 principal operations performed at this institution during the last year, I find that this operation has been resorted to in 118 cases. Of a variety of affections, about 1,000 patients are here annually treated, and there is no better place for students to study this class of diseases."

ARRANGEMENTS have been made to prepare for publication a "Medical and Surgical History of the War." The medical portion of this work has been committed to Assistant Surgeon J. J. Woodward, United States Army, and the surgical part to Brigade Surgeon John H. Brinton, United States Volunteers. All medical officers are requested by the Surgeon-General to co-operate in the undertaking by forwarding to his office such reports, etc., as may be of value for the work.

Clinical Remarks on the Treatment of Chorea. By DR. WILKS.

It is well known that there are fifty remedies against this disorder, and even more than this number may be discovered if it be worth while to collect them from medical writings; and yet those who have not the opportunity of witnessing the practice of others are well satisfied with their own particular remedy as the best, in consequence of having generally found it successful. Thus scarcely a week passes but we hear of some new medicine which will infallibly cure this disease; and even it is worth the time of the British Association to discuss the merits of some novel anti-choreal drug. All the while the believers in iron, zinc, belladonna, or galvanism, still exist. In Guy's Hospital iron was superseded by zinc; and then, according to Addison and Bird, both were inferior to galvanism. This, however, did not take a year to be forgotten, although lately revived by the French physicians.

Now, we think it would be tolerably evident to an unprofessional person, or to one unacquainted with the disease in question, that where a malady can be cured by so many remedies, it may be very well left to itself, and can be placed in the same category as hoop-

ing-cough and many other disorders which tend to a spontaneous cure. We had almost arrived at this conclusion when visiting some years ago the Paris hospitals, and discovering that at one time iron was the remedy; at another, no drug could equal strong coffee; and at another, that certain gymnastic movements, on the plan adopted at the "Hôpital des Enfans Malades," were quite sufficient to cure the disease.

It would appear to be true that tonics are useful, and that it is important to correct any morbid state of the alimentary canal. With this idea, the late Dr. Hughes had a favorite and very useful remedy, consisting of rhubarb steeped in port wine. All other medicines acting on these principles are beneficial, and we generally administer them. But in order to impress upon students the importance of attempting a rational treatment of disease, so that they may know with what purpose they are administering medicines, we have for some years past taken bad cases of chorea into the hospital, so that students might witness for themselves the fact of the spontaneous cure of the disease, in order to disabuse their mind of the false notion that iron and zinc *cure* the disease by an antidotal sort of action.

The result, we may remark, can scarcely be obtained except in a hospital, for the cure seems to depend upon the removal of all those circumstances which may have excited the disease at the onset and then perpetuated it, as well as upon the controlling the patient by the stricter discipline of an institution and the more correct regimen. Thus it is, that although amongst our out-patients recovery will ensue under the ordinary treatment in a certain time, yet this is often protracted, and sometimes even no benefit at all results. Under these circumstances, if the patient be admitted into the hospital, a change speedily takes place. We should state that as the hospital nurses are stanch believers in physic, we have been obliged to order the children a little colored or sweetened water. We append a few cases, in order to prove our position that chorea is a disease which tends to get well of itself, but is assisted in the process by tonic remedies, especially of the mineral kind. This we regard as absolutely certain, and appears, indeed, to be the only explanation of the numberless remedies which are in vogue to cure this disease.

Case I.—A girl, aged 15, had been ailing a month with symptoms of severe chorea, and had got so much worse during the last

week that she was unable to stand, and was obliged to keep her bed. Her medical adviser, a very good practitioner, had treated her up to this time without relief. On admission, it was seen to be as bad a case as is usually witnessed. She was obliged to be placed in a bed with sides to it, for fear of her falling out. She was in constant motion, throwing her limbs about, the skin of which was knocked off on several parts, owing to the violence of the jactitation. She was ordered a little syrup and water, to be taken three times a day. After a short period she began to improve, was soon able to sit up in bed, then to walk, and finally she left the hospital quite well, exactly four weeks after admission; the usual time, it may be said, when the most highly-vaunted remedies are said to cure.

Case II.—Sophia B., aged 7, admitted May 6, 1858. Symptoms of chorea had been gradually coming on for two months, but she had still been able to walk about and go to school. Two weeks ago she fell down, when all the symptoms became worse. On admission, she was unable to stand, the jactitation was general, so that she was obliged to keep her bed. A slight systolic bruit existed. She was ordered syr. aurantii ʒss, tr. cardamom. c. min. v, aq. ʒss, ter die.

On May 11th, a little better. On 14th, much better. After this she still improved, and on the 28th all movements had ceased. She then left the hospital, but was directed to take some steel mixture with her, thinking it might be of service, and not then interfering with the natural course of the disease.

Case III.—Maria H., aged 8, came into the hospital with the last-named patient, and left about the same time. Three weeks ago choreal symptoms came on without an assignable cause. A slight systolic murmur existed. Jactitations considerable, so as to prevent her doing any thing, although she did not keep her bed. She was a very intelligent child, but her father was a lunatic. She took no medicine, and in three weeks was quite well.

Case IV.—Emily J., aged 14. She had been ill two years with attacks of chorea, and had been an out-patient twelve weeks, taking several remedies, as zinc, iron, etc., without benefit. She was advised to enter the hospital on January 12, 1859. She took syrup aurantii ʒss, aq. ʒi, ter die, and at once began to improve. On February 1st she walked about, and was almost steady. In two more weeks she left well.

Several other cases of a similar nature might be mentioned, where the children recovered without the administration of any medicine. We remember two cases where colchicum was given, after strong recommendation, with good result; but probably the disease had only worn itself out.—*London Med. Times and Gaz.*

New Pessary.—Dr. B. F. Taft, of Blackstone, has shown us a pessary of his invention, which is quite novel in its design and seems likely to answer an excellent purpose. We are not fond of pessaries, and are very skeptical of prolapsus uteri. Very few of the women whom we have examined, who supposed they had "falling of the womb," were really suffering from this affection. We believe that most of the contrivances which have been and are still introduced for the relief of an imaginary or an exaggerated disease, are pernicious incumbrances. And then they are awful instruments in the hands of quacks. Still there are cases of genuine prolapsus, and for the relief of such we have seen no contrivance better than, if any as good as Dr. Taft's. The instrument is made in two parts. The upper portion may be described as half of a hollow sphere, the concavity being adapted to receive the os uteri, and the centre of its convex surface being provided with an opening for the escape of discharges from the uterus and for the application of injections. The other portion of the instrument consists of a cup-shaped extremity, to receive the above-mentioned hemisphere, which is prolonged in a hollow, narrow stem down to the outlet of the vagina, where it is attached to a plate, which is held in place by straps. The hemisphere is first introduced and applied to the os in whatever position it happens to be, and the cup below easily receives it, the whole apparatus being applied without the least violence to the organ. The two parts of the instrument play one within the other, adapting themselves thus to the position and movements of the body. By an ingenious contrivance the external end of the instrument also slides freely up and down in the supporting plate, and thus the whole apparatus acts as a perfectly firm, yet flexible supporter. The tubular character of the stem admits of a free application of injections to the os. The instrument is made of India rubber, thick enough for purposes of support, vulcanized with oxide of zinc instead of a salt of lead, by which the irritation sometimes

caused by the usual combination is avoided. The whole contrivance is very ingenious and well calculated to answer the purpose designed in cases where it is needed; as indeed certificates in Dr. Taft's possession prove it to be.—*Boston Med. and Surg. Jour.*

Sulphuric Ether as an Anæsthetic in Military Surgery. By FREDERIC D. LENTE, M.D., of Cold Spring.

I send the following notes of the effects of sulphuric ether in military surgery as an appendix to the account of the Mill Creek Hospital, published in a previous number. The cases were not *selected*, but are such as we happened occasionally to have time and opportunity of noting accurately by the watch. In some of the cases, also, the ether was administered by those who had not previously had much experience in its use. Its effect was so prompt and unexpected to many that I was asked, on more than one occasion, if chloroform had not been mixed with the ether. It was, however, used in all cases just as it was furnished by the hospital steward from Squibb's package. At first, it was a question among the surgeons as to what anæsthetic should be selected; but, after ether had been tried a few times, no better anæsthetic was desired, and no other was used except on one occasion, through a mistake of the steward, on which occasion the patient was with some difficulty resuscitated, chloroform having been given with the usual freedom of sulphuric ether.

Trephining, time two and a half minutes, quantity an ounce and a half. Amputation of thigh, time five minutes, two ounces. Extraction of ball from head of tibia, two minutes, seven drachms. Amputation of thigh, two and a half minutes, ten drachms. Large incision of knee-joint, searching for ball, four minutes, twelve drachms. Amputation at knee-joint, three minutes, two ounces. Incision of infiltrated scrotum, half a minute, six drachms. Exsection of shoulder-joint, one minute ten seconds, ten drachms. Exsection of humerus, one minute two seconds, six drachms. Amputation of thigh, three minutes, twelve drachms. Amputation of thigh, four minutes, twelve drachms. Counter-opening in knee-joint, extraction of ball, three minutes, twelve drachms. Searching for ball in the thigh, large incision, three minutes, two ounces.

The above operations were witnessed by many well known sur-

geons of the State of New York. The time was noted in the first cases by Dr. Thomas C. Brinsmade of Troy, in the others by Dr. Wolcott of Utica, and by myself, occasionally by another surgeon. The ether was generally either administered by Dr. McLean of the 2d N. Y. V., who had always previously used chloroform, but who quickly perceived the advantage of ether, when properly administered; or by myself. Dr. Brinsmade administered it occasionally; Dr. Kissam, of Brooklyn, also.

It is evident, from the effect of the ether in the above cases, and in others where the time was not accurately noted, and is therefore not given, that it is even more efficient as an anæsthetic in military than in civil surgery; the very rapid absorption being probably due to the depressed and feeble condition of the patients. The last case noted, however, is not of this kind. The officer had been wounded at Bull Run, and is now in full health; the ether was administered to him a few days ago at West Point. In all the cases, the inhaler made use of, and which I find more efficient than even the large cupped sponge, was formed by two coarse stiff towels, folded lengthwise, laid together, and then rolled into a cone, with a handkerchief thrust into the bottom, to render it more shallow and increase the surface for the ether. This fits the face accurately, and effectually excludes all unnecessary air.—*Amer. Med. Times.*

Utility of Coffee in Soldier's Diet.—M. Larrey, having been called upon by the Council of Health of the Department of the Seine for his opinion as to the desirableness of extensive employment of coffee in the soldier's diet, speaks in his reply in the warmest terms concerning its use. He states that upon his father's recommendation it was employed freely in Algeria, with the best effects upon the soldier's health, as a substitute for brandy. It has also, seemed to act in some measure as a prophylactic to intermittent fever.—*London Med. Times and Gazette.*

The Hygeia Hospital at Fortress Monroe is to be broken up, and the patients transferred to a more healthy and convenient place. An order will also be made to discontinue sending sick and wounded to Yorktown. There are now at that post nearly fifteen hundred, and the accomodations are very inferior and the water unhealthy.